

1. SOME HISTORICAL REMARKS In the preceding chapter, I developed a simple propositional theory for deductive assertive illocutionary arguments. This is intended both to illustrate an illocutionary theory for assertive arguments, and to serve as the basis or model for further illocutionary theories to be developed in this book. The conclusion of an illocutionary argument is an assertion or denial which may extend the argument maker's knowledge or belief, or a supposition which is a "commitment consequence" of the argument's initial assertions, denials, and suppositions.

Assertive illocutionary acts and arguments are quite different from the statements and (locutionary) arguments investigated by familiar (locutionary) logical theories. Those theories focus on and explore semantic features of statements, without taking account of illocutionary acts or illocutionary force.

We don't use language, or speak to one another, simply by performing locutionary acts. Illocutionary acts are the "units" of speech, and of the significant use of language more generally. We learn to talk by learning to perform and to recognize illocutionary acts. We become aware of locutionary acts by reflecting on illocutionary acts and their constituents, for typical locutionary acts are abstract, or incomplete, components of illocutionary acts. They are not abstract in the sense that numbers, platonic forms, or propositions are abstract, but rather by being what is left when we mentally subtract the force of an illocutionary act.

The first deductive assertive arguments that someone encounters will surely be illocutionary arguments. The arguments that people make to find things out, or figure things out, for themselves are illocutionary arguments, as are the arguments that people address to one another. Deductive illocutionary arguments are based on rational commitment, at least the correct arguments are based on commitment. Learning to recognize rational inferential commitment must be part of what we learn when we learn to talk.

We encounter, recognize, and perform illocutionary acts and arguments before we become aware of locutionary acts and their features. It seems plausible that a person learns to recognize the locutionary components of illocutionary acts by reflecting on what is going on when she performs those acts. Perhaps not everyone does recognize them, or it may be that people learn to take account of the distinction in practice without understanding that this is what they are doing. How else can we understand those philosophers who recognized only the three mental operations conception, judgment, and reasoning? How else can we make sense of John Searle's dismissal of the importance of locutionary acts?

Features of locutionary acts "underwrite" many of the commitment relations linking illocutionary acts, but locutionary *arguments* are abstractions which aren't actually performed or addressed by one person to someone else. We can speak, write, or think the sentences that are used to perform the premisses and conclusions of locutionary arguments, and we can trace relations of entailment or implication linking some statements to others. But it isn't part of our normal practice to perform locutionary acts apart from illocutionary acts, we only do this when

we are being reflective, or are engaged in a theoretical inquiry. When we perform locutionary acts, and derive a further statement which these entail, we haven't *inferred* the further statement, for inferences yield conclusions that we accept (or suppose). And we haven't *argued* that the further statement is entailed by the initial statements, we have simply *recognized* that it is entailed, or *made* this evident to someone else.

When Aristotle invented logic, and developed a deductive system for establishing the correctness of what we now call syllogisms, or syllogistic arguments, I think he might have been investigating illocutionary arguments. Instead of focusing on universal and particular statements, or affirmative and negative statements, he might instead have recognized universal and particular assertions (or judgments), and corresponding denials. The denials wouldn't be performed with negated versions of the sentences used for making the assertions. Universal denials are directly opposed to particular assertions, and particular denials are directly opposed to universal assertions.

Perhaps we should credit Aristotle with developing a theory of deductive assertive illocutionary arguments. The *demonstrations* that he endorsed seem at least to be assertive illocutionary arguments whose conclusions form part of the arguer's knowledge. If Aristotle's logical system is a theory of assertive illocutionary logic, he hasn't remarked about, or marked in any way, the locutionary components of the illocutionary acts. But he couldn't be expected to do this, for he didn't invent an artificial language, he just used, and spoke, Greek. In thinking about Aristotle's logic in this way, we might wonder whether Aristotle was even aware of the distinction between a statement and its assertion or denial. Did he even recognize the acts that are here being called statements?

He must have recognized them, for Aristotle also employed *reductio*, and made *indirect* arguments, which are characteristic of natural deduction. In our systems of natural deduction, we suppose sentences, or the statements these represent, to be true, or to be false, and deduce consequences which are also illocutionary acts performed with statements. Aristotle understood that reasoning from a supposed statement to a conclusion whose statement is known to be false justifies an arguer in discharging the supposition and asserting the contradictory opposite of the statement that was supposed true. In chapter 27 of Book II of the *Posterior Analytics*, Aristotle says (in my translation) that *reductio* arguments are inferior to demonstrations, and that negative demonstrations are inferior to positive ones. I don't understand these rankings, but he must have been aware of the distinction between locutionary and illocutionary acts to even carry out an indirect argument.

However, Aristotle, so far as I know anyway, didn't spell out the difference between locutionary and illocutionary acts. So he may have recognized the distinction sufficiently well to take account of it, without having fully analyzed what it involves. Frege, in inventing modern logic, makes it easier to recognize the statements that are components of assertive illocutionary acts. Frege made several changes to logic from the discipline or subject matter that Aristotle had conceived and explored. Aristotle seems to have been primarily concerned to understand proof

and demonstration, to understand how it is that simply by reasoning, either from what we know already or from scratch, we can obtain new knowledge. He fastened on what we now call syllogistic arguments, and apparently thought that the middle term which occurs in the premisses but not the conclusion of a categorical syllogism has a lot to do with the success of deductively correct syllogistic arguments.

Frege was concerned to reason both carefully and correctly, but he didn't think logic was (or should be) the study of reasoning or of arguments. Frege designed an artificial logical language whose atomic sentences are ontologically perspicuous, because categories of expressions correspond to kinds, or categories, of things in the world and the sentences are used to represent things being combined in ontologically appropriate ways. Frege's basic ontology is reflected by singular terms and predicates. The singular terms are used to represent (or pick out) objects, while the predicates are used to represent the objects as having features, or as satisfying criteria associated with the predicates.

The formal language is *logically* perspicuous for having both an ontologically perspicuous substructure and readily apparent logical expressions to be used for constructing sentences that aren't atomic. (But Frege's inconvenient notation is less perspicuous than it might have been, and should have been.) The perspicuity of Frege's logical language is *visible* or *visual*. We can tell from the symbols used and their spatial arrangement what they are being used to do. Artificial logical languages are primarily written languages, while ordinary language, natural languages, are primarily spoken. Frege made designing a visibly perspicuous artificial language an essential feature of developing and investigating a logical theory. Although it doesn't seem impossibly difficult to teach syllogistic logic to someone who is blind, even someone who is blind since birth, it can't be so easy to teach modern logic to someone who is blind.

Frege, like Aristotle, is concerned with proof and demonstration, although Frege fails to realize that determining what are the norms that govern deductive arguments and applying these norms in constructing and evaluating arguments are legitimate logical pursuits. Frege is particularly concerned with what we might call the logical structure of language. He designed a deductive system in which visibly perspicuous artificial language sentences or schemas are used to construct visibly perspicuous proofs or derivations of logical principles (logical truths). For Frege, an important feature of his language and deductive system is that proofs of logical principles can be checked mechanically, eliminating any need for appeals to intuition as one proceeds.

It seems clear that Frege *was* explicitly aware of the statements which are the locutionary components of typical assertive illocutionary acts. In his *Begriffsschrift*, Frege amended the older conception of mental operations which recognized only conception, judgment, and reasoning by recognizing an additional component. His "content stroke" represents the act of combining conceptual components into a propositional mental act, which can then be judged to be true, or to be false. When formulated linguistically, the propositional mental act is the kind of locutionary act that I am calling a statement. So Frege recognizes conception, the formation of a true or false

propositional thought, judgment, and reasoning. When the horizontal content stroke is combined with the vertical judgment stroke, the result is the sign of assertion:  $\vdash$ .

However, the account in *Begriffsschrift* seems somewhat tentative, for I believe that Frege was “feeling his way.” And the theorems in his logical theory are puzzling, because they don’t appear to be, or to represent, genuine assertions. Frege attached the content stroke and the assertion stroke to (open) formulas rather than to sentences. Still, in a footnote to an article of his, P. E. B. Jourdain quotes from a note that Frege sent him (this is reproduced in *Frege 1879*). Frege criticizes some remarks that Russell made about variables, and suggests that ‘variable’ is not a helpful word to use. Frege says that in his notation, Latin letters serve to *confer generality* on the content of a theorem.

Frege may be thinking of the expressions that we call variables as schematic letters. That is how we would understand the letter ‘*A*’ in the following:

If *A* is a true statement, then  $\sim A$  is false.

Given the schematic letter understanding, we might use this schematic sentence to make a universal statement about all true statements. This could indicate that Frege regarded the theorems of his deductive system as asserted sentences or statements. However, in spite of having recognized the distinction between statements and assertive illocutionary acts, Frege didn’t approve of arguments by natural deduction.

Frege’s artificial language, in addition to being ontologically perspicuous with respect to what its atomic sentences represent, is also ontologically perspicuous for presenting or representing the assertive locutionary and illocutionary acts that the speaker performs. Frege, for example, prefixes the theorems of his system with the sign of assertion which combines his horizontal and vertical strokes. But Frege’s illocutionary operators were not understood by his readers, and were not “picked up” as features of modern logic. This seems largely due to the fact that his horizontal and vertical strokes do no work in Frege’s logical system. The horizontal content stroke is completely unnecessary, because the act of combining conceptual components to obtain a propositional thought is represented simply by the act, or fact, of producing a well-formed sentence.

And every theorem in Frege’s deductive system is an assertion, as are the formulas used in the proofs of those theorems. Since all the illocutionary acts being performed are assertions, there is no reason to keep indicating this. What Frege needed to do is what we have done in the first chapter of this book: to recognize different types of assertive illocutionary acts, and introduce different symbols to mark assertions, denials, and suppositions. Doing this calls for employing systems of natural deduction in which suppositions are introduced and discharged.

In any case, by making the basic sentential items in his formal language be atomic sentences or formulas, Frege provided a language suited to the kind of semantic account that

Tarski later provided. That account treats sentences and sentential formulas as representations of statements with truth conditions, rather than as representations of assertive illocutionary acts. Such languages have also proved convenient for being explored by systems of natural deduction, although the languages don't provide representations for the assertive illocutionary forces that are important for deductive assertive illocutionary arguments.

2. PRIMITIVE ASSERTIONS AND DENIALS The older understanding of mental operations which recognizes only apprehension (or conception), judgment, and reasoning has no place for acts of apprehending statements in abstraction from illocutionary force. I think it likely, or, at any rate, plausible that the ability to use language, or the way that people use language, developed in stages. To begin with, people used language in a first-stage way. Subsequently, they learned how to use it in a second-stage way, and so on. This conjecture motivates my claim that denial is prior to statement negation. I also think it likely that children today acquire the abilities to perform different types of language acts in roughly the order that these skills were originally acquired by the language-using population.

While I think it likely that my conjectures are correct, it isn't terribly important to my project in this book that they are correct. For thinking of language and its acquisition in this way is in any case a heuristic device which helps to understand the structures of illocutionary acts and the relations linking various language acts.

If at an earlier stage people didn't distinguish locutionary from illocutionary acts, they might have recognized and performed different kinds of illocutionary acts than those we considered in the first chapter. For example, instead of considering a statement like this:

Socrates is a philosopher.

which can be asserted, denied, or supposed to be true, or false, someone might use the expression 'philosopher,' or 'is a philosopher' to *assert* being a philosopher of Socrates. Such a person would use the predicate to do two jobs: (i) represent an object as satisfying the criterion for being a philosopher, and (ii) mark the force of the sentential act as an assertion. For our purposes, we can represent such an act, which I will call a *primitive assertion*, like this:

$\vdash_{\text{philosopher}}$  Socrates

The speaker refers to Socrates and asserts being a philosopher of Socrates. I think it likely, that people performed primitive assertions (and denials) before they developed more sophistication about language, and learned to recognize force-free statements that can be performed with different illocutionary forces. I also think it likely that children learning language today perform primitive assertions before they learn to recognize, or perform, force-free statements.

The "idea" of a primitive assertion is that the person who makes such an assertion doesn't separately conceive the locutionary act which represents (in this case) Socrates as a philosopher.

That locutionary act is still an abstract component of the primitive assertion, because *we* can distinguish representing things as being a certain way from accepting, rejecting, or supposing that things are as they are represented to be. But even now a person who routinely performs non-primitive assertions might not realize that this is what he is doing, and might think of all assertions as being primitive.

At an initial stage of using language, when all assertions are primitive assertions, predicates can only be used to indicate the illocutionary force of assertion. A denial at this stage is not an act of rejecting a statement, or even an act of blocking the assertion of a statement. Instead, a primitive denial blocks, or bars, *asserting a predicate of* an individual or individuals. We will represent a primitive denial like this:

$$\vdash_{\varphi} (\otimes \text{ is not}) \alpha$$

The expression in parentheses represents an act which blocks the predicate  $\varphi$  from being asserted of  $\alpha$ . This denial *separates*, or *divides*, the predicate expression and the predicative assertion from the referring act. The primitive denial might be considered to be (and could be called) a *judgment of division*.

Someone who has gotten beyond the stage where all assertions and denials are primitive, can recognize and perform statements which are true or false. But what makes a statement true is its “fit” with the world. The expressions (and the language acts performed with them) that are “responsible” responsible for the statements’ fitting (or not) are *predicates*. For a predicate is associated with a criterion (or criteria), and is truly applied to objects which *satisfy* this criterion. The very idea of there being a criterion associated with a predicate indicates that predicates are *intended* to be applied to objects that satisfy their criteria—that predicates are *in the language so that we can use them for making* assertions.

In a *primitive assertion*, the connection between a predicate and its assertion is even “closer,” for the predicate is used to both represent an object (or objects) as satisfying its criterion and assert that the object does satisfy the criterion. The predicate is used for *judging the object or objects to satisfy the criterion*. Primitive assertions deserve to be called *judgments of composition*. In our more sophisticated assertions, *fully developed* assertions, a statement is conceived independently of its being asserted/accepted.

If someone now were to think that all assertions are primitive assertions, so that he doesn’t recognize force-free statements that we can make and simply consider, it would be natural for him to hold that we haven’t said much when we predicate ‘is true’ of a language act. For that person would recognize no independent statements which either fit or fail to fit the world. Following Searle, he might think it is primitive assertions that have *conditions of satisfaction*, and not associate these conditions with statements. For him, a primitive assertion is *objectively incorrect* if its predicate is asserted of an object which doesn’t satisfy that predicate’s criterion. The primitive assertion is *objectively admissible* otherwise.

The person who knows of primitive assertions and no other kind of assertion won't be in a position to understand truth as correspondence, for he lacks awareness of the statements that do the corresponding. But he will understand how one person can *endorse* the assertion of someone else. If he encounters people speaking of truth or of true statements, it would be natural for him to understand 'is true' to be an expression for marking agreement with the claims of someone else. If he wasn't thinking of someone else's claims, it would be particularly pointless to say something like "It is true that Bill is asleep," for he would only be expressing his own agreement with his own assertion. (However, he might use this locution for making emphatic assertions.)

Many of the things that Searle says in *Speech Acts* suggest that he was thinking of primitive assertions. In his discussion of predication in that book, he associates illocutionary force with predicates and predication. And his arguments against the very idea of a locutionary act make more sense if he thinks (or thought) that all illocutionary acts are of the primitive variety.

3. FULLY DEVELOPED ILLOCUTIONARY ACTS We now can, and sometimes (often?) do, perform statements with no illocutionary force, and we recognize the statements which we assert, deny, or suppose. Someone who performs only primitive assertive illocutionary acts doesn't recognize the statements which are abstract components of her illocutionary acts, but *we* are able to perform *fully developed* illocutionary acts in which we either do, or are prepared to, separately conceive the statements that are asserted, denied, or supposed. Separately conceiving these statements is not the same as separately performing them. We don't first perform the statement representing Socrates as satisfying the criterion associated with 'is a philosopher,' and subsequently accept the statement. We perform the statement and accept it all at once. But we *recognize* the statement that might also be denied or supposed, or reaffirmed on another occasion.

It is a breakthrough to be able to make (to perform) statements which can be performed with different forces, and to be able to consider these statements abstractly, apart from illocutionary force. Someone who initially makes primitive assertions but no other kind must reflect on, and analyze, what she is doing, before she can distinguish an object's satisfying the criterion associated with a predicate from the assertive force with which a primitive assertion is made. Once she has made this breakthrough, a language user can represent an object as satisfying a predicate's criterion, and accept or reject that representing act.

When a person who performs fully developed illocutionary acts makes and accepts a statement all at once, the statement is not performed by itself, with no illocutionary force. But the sophisticated speaker (writer, thinker) can conceive the statement as a "unit" which might figure in different assertive acts. It is easy for us to consider the statement we assert, apart from its illocutionary force, a statement which is not the same, or even more-or-less the same as what Searle understands by a propositional act. The statement is appropriately considered to be a locutionary act in Austin's sense.

This representation of a simple assertion:

$$\vdash[\alpha \varphi]$$

represents an act in which the statement is distinctly conceived, and intended. But the speaker doesn't first articulate or perform the statement, and subsequently accept it. She performs the statement with the force of assertion. The statement itself is an abstraction, it is what is left if we ignore the illocutionary force. However, the speaker thinks this abstraction, and is able to withdraw her acceptance, either temporarily or permanently, while still considering the statement.

The statement is not *merely* representing  $\alpha$  as being  $\varphi$ , it isn't just a picture. Predicates and the sentences they compose are in the language to make it possible for us to represent the world *as being this way or that*, and to accept *that* this is how things are. We make factual statements so that we can make factual assertions. These assertions are successful if their statements fit the world. The statements themselves are *institutionally* successful if they fit the world. But people don't always make true statements, and they don't always intend to make true statements. However, the person making a *factual* statement must at least intend that her statement can be "measured" against the world, that it either *fit* or *fail to fit* the world, but not both.

It requires greater understanding, more sophistication, to be able to make, and to recognize, statements than it does simply to make and understand primitive assertions (and denials). This increased sophistication is also necessary in order for a person to be able to make compound statements, and to suppose statements to be the case. This increased sophistication enables a person to carry out "natural" deductions in which she makes and discharges hypotheses.

In typical cases, a speaker (language user) who performs an assertive illocutionary act also performs the statement that she asserts or denies or supposes. But it is possible to perform an assertive illocutionary act without making the statement that the assertive act concerns. Consider the following sentence:

Milwaukee is not in Illinois.

There are different illocutionary acts that this sentence might be used to perform, but such sentences are very commonly used to make denials. If Anne used this sentence to deny that Milwaukee is in Illinois, she might use 'Milwaukee' to refer to that city, and use 'not' to *block* or *impede* the predication of 'is in Illinois' of Milwaukee. If she does this, the 'not' will function as an illocutionary operator, making the force of denial explicit simply by interfering with the formation of the statement which the denial rejects.



With such a denial, Anne rejects a statement which she doesn't actually make. These denials, like the primitive denials considered earlier, can be regarded as *judgments of division*. Anne uses 'not' to divide her referring from her predicating. Even though it isn't actually formulated, the statement "Milwaukee is in Illinois" is, clearly, what the denial rejects. If Anne said instead, "I deny that Milwaukee is in Illinois," her formulation might strike us as a little pompous, or overly formal, but her denial would actually employ the statement that she rejects. Some assertive illocutionary acts are performed with statements, and some aren't, but an assertive illocutionary act will be concerned with an assertive locutionary act or acts, with one or more statements, and with the issue of the statements' fitting the world.

Because not all assertive illocutionary acts employ the statements that are the focus of their concern, the notation we have employed in the artificial language  $L_1$  slightly misrepresents such acts. This allows us to employ a uniform notation for representing all assertive illocutionary acts that are concerned with a single statement, without affecting what is important for our logical theory.

The "breakthrough" involved in learning to separately conceive the statements that are the concern of assertive illocutionary acts must be part of the explanation for what enables children to eventually solve the "false belief" problem. We can characterize this problem by considering the following scenario. A test subject, a child, watches a drama where person  $A$  places something, chocolates say, in the top drawer of a chest, and then leaves the room. A second person,  $B$ , enters the room, removes the chocolates from the drawer, and replaces them with something else, perhaps with stones. The child is asked what person  $A$  will say upon his return if someone asks  $A$  what is in the drawer. Children at some point before their fourth birthday routinely answer that  $A$  will say that stones are in the drawer. Older children (and we ourselves) get it right, and answer that person  $A$  will expect to find chocolates. There are lots of questions, and areas for research, that one might have about this situation. But I think the philosophically most interesting puzzle is to determine just what it is that the younger children don't or can't do, that leads to their characteristic answers. What fundamental skill, or piece of knowledge, must have been acquired by children when they finally answer correctly?

My conjecture is that the younger children are at the stage of language development in which most, or even all, of their assertions are primitive assertions, and that they are only able to perform the predicative acts which constitute primitive assertions. They are unable to properly report what person  $A$  will say, because they can only use predicates to make their own primitive assertions. They can criticize someone else for being mistaken, but they can't perform assertions from someone else's perspective. Once they learn to make statements, and to recognize statements, attending to what is represented rather than to the issue of how things really are, they can say what it is that  $A$  will accept without accepting the same thing themselves.

4. THREE KINDS OF ARGUMENTS In considering assertive illocutionary acts and arguments in the preceding chapter, we have distinguished three kinds of deductive arguments or derivation:

*locutionary* arguments which are ordered pairs whose first members are sets of statements, the premisses, and whose conclusions are single statements, which are valid if their premisses entail or imply their conclusions  
*deductive derivations* linking premiss statements to conclusion statements, which are sound if their premisses entail or imply their conclusions  
*illocutionary arguments* which are deductively correct if their premiss acts rationally and inferentially commit the arguer to perform their concluding acts

There are also three corresponding types of assertive non-deductive arguments or derivation. The premisses of a locutionary argument can provide support to a conclusion which is less than decisive, a *semantic* derivation can establish that some statements make others more or less probable without entailing them, and an illocutionary argument can strongly or weakly *authorize* the arguer to perform the conclusion act, even though the premiss acts do not *commit* her to perform the conclusion act. However, in this book, my focus is on deduction, on logical and analytic truth, on entailment, implication, and validity, and on rational commitment.

A locutionary argument is an abstraction that we can represent and evaluate, but it is not an argument that a person can make or construct, or that one person can address to someone else. To (informally) represent a locutionary argument from premisses *A, B, C* to conclusion *D*, I will use the following:

$$\langle \{A, B, C\}, D \rangle$$

The ordered-pair notation is intended to make clear that the represented argument involves sets, which are not “items” that a person can produce. A locutionary argument is *valid* if its premisses *entail* its conclusion, and *logically valid* if its premisses *imply* its conclusion (on the basis of logical forms reflected in a logical theory which we are working with). Standard theories often provide the resources to establish that locutionary arguments are logically valid. Although deductive derivations are sometimes considered to be a kind of argument, they are not locutionary arguments, and they must be distinguished from *illocutionary arguments*. Which is why I prefer to call them *derivations* rather than arguments.

Locutionary arguments are abstractions that we can talk and think about, but they aren’t language acts that someone can perform. Illocutionary arguments are the arguments that people *can* perform. Illocutionary arguments are themselves language acts that people make and (sometimes) address to other people.

Illocutionary arguments are either simple or complex. Complex illocutionary arguments contain component arguments. Those illocutionary arguments that cancel, or discharge, suppositions are invariably complex. Locutionary arguments don’t come in these two varieties. There are just a number of locutionary premisses and a single locutionary conclusion. And the different strengths of assertions and denials on the one hand, and suppositions on the other have no counterpart features in locutionary acts.

We evaluate deductive assertive locutionary arguments in terms of entailment, implication, or some other truth conditional relation that can link the sets of premisses to their conclusions. Deductive derivations are evaluated on the basis of whether they *establish* that premisses entail or imply or have some other important semantic relation to their conclusions. And deductive illocutionary arguments are evaluated in terms of rational inferential commitment. A simple assertive illocutionary argument is *deductively* correct if performing the premiss acts will inferentially commit an arguer to perform the conclusion. The argument is *logically* correct if the commitment is based on the logical forms of the illocutionary acts in the argument. Complex illocutionary arguments must contain deductively correct component arguments, and reach a final conclusion which the initial (undischarged) premiss acts commit the arguer to perform.

A logical theory which is adequate to explain and guide what we do in using language to perform illocutionary acts must provide the resources for representing and constructing and evaluating illocutionary arguments. We also expect the total theory to provide resources for representing the locutionary acts that are components of those illocutionary acts, and to spell out truth conditions for those locutionary acts that enable us to carry out deductive derivations and evaluate locutionary arguments. The large literature on non-classical logics shows that it is possible to construct locutionary theories for which it isn't clear that there are illocutionary counterparts, but in this book I am focusing on illocutionary acts of kinds that people do, or can, perform, and on the locutionary components of these acts.

5. THE PRACTICALLY IMPORTANT ARGUMENTS Our logical systems for assertive illocutionary arguments provide an appropriate notation for representing assertive illocutionary acts, and a formal treatment of rational inferential commitment. A system of logic whose language contains singular sentences and which accommodates arguments containing suppositions or hypotheses must represent both locutionary and illocutionary acts. To understand and employ such a system, a person must realize that the statement she supposes is the same statement that she can also assert or deny. Statements are locutionary acts which have truth conditions, while suppositions, assertions, and denials are illocutionary acts constituted by performing statements with appropriate illocutionary forces. It is assertive illocutionary acts that are components of deductive assertive illocutionary arguments.

Standard logical theories, locutionary theories, are designed to explore logical truth, implication, validity, and logical consequence (and, sometimes, other features as well). When deductive derivations are used to establish these results, the derivations themselves are not the objects being investigated—they are not the focus of attention. Someone who develops a theory for studying and constructing illocutionary arguments focuses both on the arguments and the results she establishes by these arguments. For the arguments that she uses to develop the theory are the same kind of deductive arguments that she uses to extend her knowledge and belief.

The language acts and the arguments that are the focus of attention for the logical theory in chapter 1 are *assertive* illocutionary acts and deductive assertive illocutionary arguments. Assertions, denials, and positive and negative suppositions are examples of assertive acts. These

acts employ or involve statements, which are the kind of acts that Austin calls *locutionary acts*. Although John Searle has argued against taking locutionary acts seriously, and has himself seriously misunderstood the importance of these acts, we have seen that many (most?) standard logical theories are locutionary theories which explore features of statements, features of locutionary arguments and features of locutionary argument sequences.

Illocutionary acts are the complete language acts that people use to express and register their knowledge and belief, to get people to do things, to register and communicate the acts they intend to carry out, to maintain social relations, to perform various official and ceremonial acts, and on and on. People perform assertive illocutionary acts to express their knowledge and belief (and disbelief), and in carrying out deductive and non-deductive reasoning. Assertive illocutionary arguments are the kind of arguments that figure in “real life,” as opposed to the deductive derivations employed in logic books and logic courses. Assertive illocutionary arguments begin with premisses which are assertive acts, and reach conclusions which are also assertive acts. People commonly make assertive arguments to find out, or figure out, things for themselves, and to persuade other people. In spite of the practical importance of illocutionary arguments, standard logical theories pretty much ignore illocutionary acts and arguments, and focus on the *locutionary underpinnings* of illocutionary arguments.

However, standard logical theories, broadly conceived, do employ illocutionary arguments, for proofs of results like the soundness and completeness of a deductive system are illocutionary arguments. They establish assertions, and not simply statements, but their illocutionary character is not generally either recognized or acknowledged.

Although assertive illocutionary acts and arguments are my primary concern in the present book, in this chapter I will situate the study of assertive acts within a larger enterprise which deals with several kinds of illocutionary acts and arguments. Parallels between assertive acts and other types of illocutionary acts illuminate all of these acts.

**6. OTHER CATEGORIES OF ILLOCUTIONARY ACTS** Assertive locutionary and illocutionary acts, and assertive locutionary and illocutionary arguments, have been the concern, or focus, of most research in logic and of most logical theories. But the conceptual framework for language acts, especially the framework for thinking and talking about illocutionary and locutionary acts, accommodates all the things that people do with language, and has many “areas” that are relatively unexplored or underexplored. In the remainder of this chapter I will further articulate this framework by linking assertive acts to other types of illocutionary and locutionary acts. My main concern in this book is the study of assertive illocutionary acts and arguments, but this study is illuminated and enhanced by investigating relations between assertive acts and acts of other types.

There are many different ways of classifying illocutionary acts that we might adopt. For my purposes here, John Searle’s classification is convenient, because it accommodates the acts that people actually perform, and Searle’s terminology is well-chosen. But I understand some of

his categories a little differently than Searle does. For example, the primary idea behind Searle's scheme is *direction of fit*. Searle thinks that different kinds of illocutionary act have different directions of fit. But I understand assertions and denials to both be fundamental kinds of illocutionary act, and to both belong to the category *assertive illocutionary acts*.

According to Searle, assertive acts have the *word to world* direction of fit. We can understand how the assertion of a true statement might be regarded as fitting the world, or some portion of it. However, if we deny a false statement, there seems to be nothing in the world for this denial to fit. What fits the world or not are *statements*, which are locutionary rather than illocutionary acts. I understand *assertives* to be those illocutionary acts that are *concerned* with the issue of statements fitting the world or not. Assertions, denials, and suppositions are all assertives, but they are not all acts which present statements as fitting the world. Questions are also concerned with finding statements that do fit the world, or with finding out whether a given statement fits the world or not. Questions belong both with assertives and with *directives*.

An assertion or denial or supposition doesn't need an audience, but these acts can be addressed to someone or other. It is often the case that the speaker who addresses an assertion to someone else, or who makes a public assertion, is endorsing that assertion. (Two people can't make essentially similar assertions, but they can each assert a statement that is essentially similar to the statement asserted by the other person.) A *directive* illocutionary act, on the other hand, absolutely requires an addressee. For a directive act aims at getting the addressee to do (or not do) something.

To characterize and represent directive acts, it will be helpful to choose some symbol for directive force. For assertive acts, Frege's choice of the assertion sign was convenient, because this sign lends itself to variations for denial and both positive and negative supposition. I have no equally appropriate candidate for directives, but will simply use a bold-type upper-case symbol obtained by turning a Greek delta on its side so that one corner points to the right:  $\triangleright$ . Delta is the Greek counterpart, and perhaps source, of the Latin letter 'D.' And 'D' suggests both *directive* and *do*. (I have chosen symbols that are available on Word Perfect, because that is the program I find most convenient to use. If I instead used LaTeX, I would not use bold type symbols.)

Directive acts are performed with *directive force*, but there are a variety of directive forces. I can *order* someone to sit down, *ask (request)* him to sit down, or *advise* him to sit down. I indicate these forces with superscripts, as follows:

$\triangleright^{command}$        $\triangleright^{request}$        $\triangleright^{advise}$

Directives are directed *to* addressees, and what are directed are *kinds of action*. If 'S' is an expression for the act or action of sitting down, and 'd' names a particular Dave, then we might represent some directives like this:

$\triangleright^{command} [d S]$        $\triangleright^{request} [d S]$        $\triangleright^{advise} [d S]$

The total expression within the square brackets is not a statement, and doesn't represent a statement. What is said, or represented, by the expressions in square brackets isn't true or false. (Remember, the expressions in our artificial logical languages aren't being used to *perform* language acts, instead we are using them to *represent* language acts.)

Statements are more-or-less the kind of acts that Austin understood locutionary acts to be. They are the concern of assertive illocutionary acts, and are like the "contents" of some assertive acts. The expression in square brackets in the preceding paragraph represents a different kind of locutionary act, one which is like the content of some directive acts. This locutionary act represents the intended addressee (Dave) as performing the act or action that he can be directed to carry out.

In making statements, we *apply* expressions *to* objects on the basis of criteria associated with those expressions. We can either say that we are predicating the *expressions* of the objects, or that we are predicating *features* of those objects—the features would be those that the criteria call for. I prefer to say that we predicate the features, or *having* the features. In English and other natural languages, we often use the same expression both to *predicate* a feature of a person and to *propose* a course of action *to* an addressee.

Ordinarily, a person performs a directive locutionary act in the course of performing a directive illocutionary act. Both the locutionary and the illocutionary act are addressed to the same person or persons. But we can consider and perform a directive locutionary act "on its own." We can speak it, write it, or think it without actually communicating anything to the intended addressee. (We are using the addressee's name to represent the addressee, but not to address her.) In doing these things, we are performing directive locutionary acts which represent the intended addressee as doing or not doing what she might be directed to do or not do.

If I use the following sentence:

Dave, shut the door!

to propose shutting the door to Dave, with the force of an order, and he complies, I can describe his behavior in these ways:

Dave shut the door. (I say this after he did it.)

Dave is shutting the door. (I say this while he is doing it.)

In making the statement that Dave shut the door, I am predicating doing (or having done) what it takes to satisfy the criterion associated with "shut the door" of Dave, although I am ordinarily doing more than that. When I propose shutting the door to Dave, I am not performing a predicative act.

In predicating shutting the door of Dave, I am performing an act which is intended to either fit the world because it is focused on a particular event of door closing, or fail to fit the world because there is no appropriate event. In proposing shutting the door to Dave, I would certainly be concerned with a particular door, and with the near future. But there is no particular act or event on which I can be focused. Both in making the statement and performing the locutionary component of the directive act, I am representing Dave as shutting the door. But only the statement is intended to fit or fail to fit the world—it is intended to be *measured* against the world.

If I ask Dave to shut the door by performing an act we can represent like this:

$$\triangleright^{request} [d S]$$

we need to adopt some terminology for describing what is going on. While the ‘S’ in the square brackets is not a predicate and does not represent a predicative act, it represents an act for which we need a name. Let us call it a *proposal*. If I actually address Dave and combine this with the proposal to shut the door, or merely use Dave’s name to represent Dave and combine this representing act with the proposal to shut the door, the locutionary act I am performing is a *plan*. Proposing shutting the door to Dave constitutes a plan. So does rehearsing this proposal when Dave isn’t present, or writing it or thinking it.

A statement is true if its truth conditions are satisfied, we might informally speak of the true statement itself as being satisfied. Plans aren’t true or false, but a plan represents the addressee as carrying out, or performing, the directed action. If the addressee does carry out the directed action, he has *implemented* the plan. If a plan is implemented, we can also say that it is *satisfied*. However, in order to implement a plan, the addressee must intend to perform the action involved. If Mark stumbles and accidentally knocks the door shut, he has not implemented the plan “Mark, please close the door.” For a directive act to be fully successful, the addressee must hear, and understand, the directive utterance, he must implement the directive’s plan, *and must do so in order to comply with the directive*.

In performing a directive act, it is common to omit a name or other expression for the addressee:

$$\triangleright^{command} [S] \qquad \triangleright^{request} [S] \qquad \triangleright^{advise} [S]$$

Even when there is no expression for the addressee, it is still the addressee who is represented as performing the directed action. Perhaps we should represent the unidentified addressee like this:

$$\triangleright^{command} [addressee S] \qquad \triangleright^{request} [addressee S] \qquad \triangleright^{advise} [addressee S]$$

Just as assertions, which are positive, have negative counterparts, denials, so directives have both positive and negative versions. We can direct someone to shut the door, and direct her

not to shut it. English gives us the word ‘denial’ for the negative opposites to assertions, but doesn’t give us good words for negative directives. Let me call the two kinds *do directives* and *don’t directives* if the need arises to call them something. We obtained the illocutionary operator for denial by turning around, or rotating, the operator for assertion. I will use the same idea to obtain a negative directive operator:

$$\triangleleft^{force} [a \varphi]$$

We represent a directive not to do something by “turning around” the symbol for positive directive force. There are no directive illocutionary acts which are counterparts to assertive suppositions, so we don’t need to invent a symbol for them.

Both a statement and a plan might represent a particular person as performing a given action, but the statement will represent him as performing this action so specifically that the statement can be “measured” against the world. Statements are designed to fit the world. The plan can be less specific, because it isn’t designed to fit the world. The plan is a target for the world to fit.

7. DIRECTIVE ARGUMENTS There are directive illocutionary acts, and there are also directive illocutionary arguments. Many writers who deal with directive arguments call them *imperative* arguments, but that is misleading. The word ‘imperative’ suggests orders or commands, and it is common for those writing about what they call imperative arguments to use language primarily suited to orders or commands. Commands *are* directive illocutionary acts, but so are requests, advice givings, recommendations, and suggestions about what someone might consider doing. A directive illocutionary argument has a conclusion which is a directive illocutionary act addressed to one or more people, and the premisses give the addressee(s) reasons to implement the conclusion.

A directive illocutionary argument attempts to get the addressee or addressees to implement the plan that the conclusion calls for. (A negative directive argument tries to get the addressee to refrain from implementing a plan, but it is simpler if I focus on positive directives, and let readers make the necessary adjustments for negative directives.) The premisses of a directive argument will not ordinarily be directive acts. An argument like the following:

Kevin, you promised to pick up Max from soccer practice, and practice ends in five minutes, so please go and get him.

might remind Kevin that he has promised, and so has already committed himself to pick up Max, in order to get Kevin to do what he promised. The premiss, or premisses, are assertive acts, while the conclusion is directive. A more perspicuous representation of the argument could be made as follows:



⊢Kevin, you promised to pick up Max from soccer practice, and practice ends in five minutes. So, ▷<sup>request</sup> (Kevin) please go and get him.

In this argument:

Elizabeth, it's been over two years since you've seen your parents, and they miss you a lot. So you must spend the holidays with them.

which we might also represent like this:

⊢Elizabeth, it's been over two years since you've seen your parents, and they miss you a lot. So ▷<sup>command</sup> you must spend the holidays with them.

the assertive premiss (or premisses) gives Elizabeth a reason to go home for the holidays, without indicating that she is committed or obligated to do this.

In these examples of directive illocutionary arguments, are there inferences being carried out? The addressee is certainly not expected to infer the directive act conclusion from the premisses that have been supplied. For the conclusion is an act that someone else aims at the addressee, the addressee is not supposed to address himself or herself. But the argument maker can't be inferring the conclusion either. The conclusion directs the addressee to perform an act or action that the argument maker wants carried out. The argument maker can't be inferring that she wants the conclusion's plan to be implemented, she wants that before she makes her argument. The argument maker is giving the addressee material that the addressee can use to carry out *practical reasoning* about whether he should implement the directive conclusion's plan. The argument maker is trying to guide the addressee's practical reasoning toward a conclusion which is an act of committing himself to implement the conclusion's plan. The arguer has the further goal of getting the addressee to implement that plan.

So if neither the argument maker nor her addressee is inferring the argument's conclusion from its premisses, is there some sense in which we can distinguish deductive from non-deductive directive illocutionary arguments? When it comes to assertive illocutionary acts, it is easy enough to understand how a person can be rationally committed to admit, or to grant, or to concede that a statement is true. What makes an assertive illocutionary argument be deductively correct is that it traces (immediate) rational commitment from the initial premisses to the ultimate conclusion. With respect to directive illocutionary arguments, the argument maker's commitments don't seem to play an important role. But the argument might show the addressee that he is rationally committed to implement the conclusion's plan, or that he is obligated or required to implement that plan.

Obligations and requirements aren't, from a logical point of view, reasons that, by themselves, commit a person to act. That I ought to do something, or am required to do something, doesn't commit me to do it. I am the one who establishes my commitments, someone else

can't do this for me. If my directive illocutionary argument is intended to get Kevin to do *F*, my premisses won't commit *me* to perform the directive act conclusion, and they can't commit Kevin to do anything. But if these premisses show Kevin that he is (already) committed to do *F*, then it seems appropriate to say that the conclusion "Kevin, do *F*" has been "unpacked" from the premisses. And that would be a reason to say that the directive illocutionary argument is *deductively correct*.

Kevin still may not do *F*, but he is violating a requirement of reason if he commits himself to act, and deliberately declines to act. If he changes his mind, and gives up his commitment, this may not be irrational. But if Kevin acknowledges his commitment, and isn't prevented from *trying* to do *F*, and doesn't at least *try* to do *F*, then his behavior *is* irrational.

8. DISJUNCTIVE DIRECTIVE PLANS There are puzzles that are sometimes raised in connection with directive acts and arguments, which might make a person dubious about the possibility of developing a logical theory accommodating directives. It is easy enough to understand a conjunctive plan like this:

David, please lock the doors and turn on the front porch light.

or this:           Margarita and Anton, dry the dishes and put them away.

A directive illocutionary act might direct one person to do two things, or direct two people to do one or more things. And a directive illocutionary argument might have a conclusion directing one person to do more than one thing, or a conclusion directing more than one person to do this or that.

In the case of the first example above, if a speaker used that sentence to perform a directive illocutionary act addressed to David, we could truly say that the speaker asked David to lock the doors. And we could also say, truly, that the speaker asked David to turn on the front porch light. But the speaker didn't make two requests, he made one request, for David to do two things. In reasoning from our knowledge of what the speaker said, or did, to the conclusion that the speaker directed David to lock the doors, we have made an assertive illocutionary argument.

If we know that a speaker asked David to *do F* and that the same speaker asked David to *do G*, we can assert that the speaker asked David to *do F*. Our assertion may have been inferred from what we know by the principle *conjunction elimination*. This principle is based on the truth conditions of conjunctive statements, or the fact that a statement "*A and B*" entails (and implies) *A*. If, in contrast, we know that the speaker asked David to *do F and do G*, we can also assert that the speaker asked David to *do F*. But now our inference is based on a principle which concerns plans, not one concerning statements. There is a *directive entailment* from "*David, do F and do G*" to "*David, do F*." Any way of satisfying the conjunctive plan will also satisfy the first conjunct.

As well as performing a directive act to get a person to do more than one thing, or to get more than one person to act, we can also perform a directive act to get a person to implement a disjunctive plan, or to get one of two or more people to act. Having old-fashioned ideas about what should be worn to dinner, Monica might say to Max, “Either take off your hat or leave the table.” Max can comply with her command by performing either one of the two acts. And in my classroom, if the door to the room is open, I might say “Shane or Federico, please shut that door.” Whichever of the two students responds by shutting the door will have seen to it that my directive has been successful.

But now consider this example. If Vladimir makes a request to Jaroslav by saying “please mail this letter,” handing him a sealed envelope with postage attached, he has asked, and directed, Jaroslav to place the stamped envelope in the mail. If he has asked Jaroslav to mail the letter, then, clearly, he has either asked Jaroslav to mail the letter or he has asked Jaroslav to burn the letter. But we all recognize that Vladimir has not asked Jaroslav to either mail or burn the letter.

This is a kind of situation which many people have found puzzling. Why hasn’t Vladimir made a disjunctive request? If we change our story a little, and have Vladimir hand Jaroslav an envelope with no postage attached, saying “Please put stamps on this so that it can be mailed,” and then later say to Jaroslav, “Please mail that envelope I handed you,” we don’t hesitate to assert that Vladimir asked Jaroslav to put postage on the envelope and to mail it. Why is *conjunction introduction* OK for reasoning about directive acts addressed to the same person, when *disjunction introduction* is not OK?

Our situating this story in the framework accommodating illocutionary acts and arguments allows us to pretty much “erase” the puzzling features associated with the story. Assertive locutionary acts, or statements, have truth conditions which can be satisfied or not. We define the relations of entailment and implication linking statements in terms of the truth conditions, or satisfaction conditions, of statements. Some statements entail a further statement if any way of satisfying the truth conditions of the first statements will also satisfy the truth conditions of the further statement, and the statements imply the further statement if they entail that statement and the entailment is based solely on their logical forms.

The plans which are the locutionary components of directive acts have implementation conditions rather than truth conditions, but the implementation conditions can be satisfied or not. And we can define relations of directive entailment and implication linking second-person plans with the same addressee and intended for the same occasion. For example, suppose that “Michael, do *F*” and “Michael, do *G*” are such plans. Then the “do *F*” plan entails the “do *G*” plan iff any way in which Michael implements the “do *F*” plan will also implement the “do *G*” plan. In the right setting, the plan:

Michael, get up from your seat and shut the door.

will entail: Michael, get up from your seat.

Michael cannot implement the first plan without also implementing the second. Michael himself probably doesn't need to carry out reasoning from one of these plans to the other in order to implement the longer plan, for it is *us* and not Michael who are interested in entailment relations linking the locutionary components of directive acts.

If we were concerned with a real event concerning Vladimir and Jaroslav, an inference from this assertion:

Vladimir asked Jaroslav to mail the letter.

to this one: Vladimir asked Jaroslav to mail the letter or he asked Jaroslav to burn the letter.

would be an assertive illocutionary inference which exemplifies the principle *disjunction introduction*, and it would be "deductively correct." An inference from:

Vladimir asked Jaroslav to mail the letter.

to: Vladimir asked Jaroslav to mail the letter or burn it.

would also be an assertive illocutionary inference, but it does not exemplify the principle *disjunction introduction*, and it isn't correct.

For this plan:

Vladimir, please mail this letter.

does not entail this one: Vladimir, please mail this letter or burn it.

To implement the simpler plan, all Vladimir needs to do is mail the letter, while to implement the disjunctive plan, Vladimir needs to do two things:

- (1) consider the disjuncts, and choose one to implement.
- (2) implement that disjunct.

Vladimir can clearly implement the simpler plan without doing these two things.

This is the right answer to the problem concerning disjunction and *disjunction introduction* for directives, but it calls into question what I said about *conjunction introduction*. For it isn't in general the case that if Mark has been asked to *do F* and has also been asked to *do G*, then he has also been asked to *do F and do G*. Just as Mark would need a disjunctive intention to

implement a disjunctive plan, so he should have a conjunctive intention to implement a conjunctive plan. But he wouldn't have that if he wasn't asked to carry out a conjunctive plan.

So, in the earlier story, was Jaroslav asked to put postage on the letter and mail it? The first request that Vladimir made was only for Jaroslav to put postage on the envelope. The second request was a request for Jaroslav to mail the letter. We aren't told whether Jaroslav had already put postage on the letter. But you can't really mail a letter if it has no postage attached, you can put it in a mail box but it won't be delivered. In case Jaroslav had not already put postage on the envelope, the second request would cover both putting on postage and dropping the stamped letter in the mail box. In the example above, it seems OK to me to say that Jaroslav was asked to do two things, but that assertion cannot be correctly inferred by *conjunction introduction* from two premiss assertions, one for the postage and one for the mailing. It was the second request that called for Jaroslav to do two things.

A different kind of disjunctive language act is often performed in connection with directive acts. We might describe this as a *do this or else* directive. Imagine that Matt tells his sister Irene, "Please visit our parents during the holidays, or they will be terribly disappointed." Matt has clearly *not* made a disjunctive request that calls for Irene to choose one of two plans and then implement the chosen plan. So what has he done? Matt has made a directive illocutionary argument. The conclusion is Matt's act requesting Irene to visit their parents. The premiss is the conditional assertion that if Irene doesn't visit, their parents will be disappointed. A presumption of this argument is that Irene doesn't want her parents to be disappointed. (Irene might let Matt know that his presumption is mistaken by saying something like "Who cares?")

9. DIRECTIVE LOCUTIONARY ACTS AND ARGUMENTS With assertives, we have recognized locutionary and illocutionary acts, and locutionary and illocutionary arguments. With directives we have recognized illocutionary acts and arguments, and we have recognized directive locutionary acts. But we have seen that there can also be *directive locutionary arguments*. Much of the literature I have consulted concerning the logic of imperatives is thoroughly confused, because the authors don't recognize or understand the distinction between directive locutionary acts and directive illocutionary acts or arguments. A directive illocutionary act tries to get one or more addressees to do something, but a directive locutionary act, performed "by itself" or "in isolation," doesn't try to get anyone to do anything. Neither does a directive locutionary argument.

We have seen above that while the locutionary acts, or plans, for directives have implementation conditions rather than truth conditions, we can still speak of these conditions being satisfied or not. The implementation conditions of plans allow us to speak of a kind of entailment and implication for plans and for mixtures of plans and statements.

It is easy enough to identify some simple plans which are linked by these expanded conceptions of entailment or implication, and we have done that with the examples above. But we are now articulating a conceptual framework, and pointing to areas that can be investigated by

developing logical theories. We are not undertaking the project of developing these theories. For example, if these sentences:

(1) Mark, get up from your seat and shut the door.

(2) Mark, get up from your seat.

were used to perform directive locutionary acts addressed to the same Mark on the same occasion, then it seems that any way of implementing (1) would also implement (2). So act (1) entails act (2), and probably implies (2) as well. But do we want to say that (1) entails (3):

(3) Mark, shut the door. ?

The plan presented by (1) is *sequential*. Mark is directed to first get up from his seat, and to then shut the door. If Mark managed to shut the door without getting up, would he have implemented the second part of the plan presented by (1)? Or is the second part implemented only if he shuts-the-door-after-getting-up-from-his-seat? I think it is best to regard the locutionary act to require Mark to shut it only after getting up, but a thorough treatment of directive locutionary entailment would demand that we settle a number of such issues.

It appears that a mixture of statements and plans can entail a plan. For example, it is intuitive that if the locutionary acts performed with these sentences:

Sam(antha), please turn off the oven at 5:20, take the cake out of the oven, and place it on a cooling rack.  
It is now 5:20.

are satisfied (the plan is implemented and the statement is true)—which makes most sense if the directive locutionary act is performed some time earlier than the statement, then this plan:

Sam, turn off the oven.

will have been satisfied, or implemented. But if there were a person who actually performed the longer locutionary act to ask Sam to turn off the oven, and that person later said the following to Sam:

It is now 5:20; so, Sam, turn off the oven.

we would not understand that person to have made the following argument with two premisses and a conclusion:

Sam(antha), please turn off the oven at 5:20, take the cake out of the oven, and place it on a cooling rack.

It is now 5:20.  
So, Sam, turn off the oven.

It is more likely that when the speaker made her first request, Samantha responded by *agreeing* to carry out the request, which committed her to do this. Then at 5:20, the speaker made a directive argument from the assertion about the current time, which should remind Samantha of her agreement/commitment, to the request that Sam turn off the oven. If both directive acts are successful, then both plans are implemented/satisfied, the plan that Samantha do three things and the plan that she turn off the oven. Though we might understand the second plan to be just the first plan, partially repeated.

If we understand these locutionary acts:

Sam(antha), please turn off the oven at 5:20, take the cake out of the oven, and place it on a cooling rack.  
It is now 5:20.

to directly entail this one:

Sam, turn off the oven.

then it is equally intuitive that if these locutionary acts:

Sam(antha), if it rains while you are at home, shut the upstairs windows.  
It is raining. Sam is at home. (or: Sam, you are at home.)

are satisfied, then this plan:

Sam, shut the upstairs windows.

will be implemented. We can represent the locutionary argument from the premisses given to the conclusion like this:

<{Sam, if it rains while you are at home, shut the upstairs windows; It is raining;  
Sam is at home}>, Sam, shut the upstairs windows. >

As before, in dealing with assertive locutionary arguments, the ordered pair notation indicates that we are considering a set-theoretic abstraction, not with an argument that someone can make, or address to another person. This directive locutionary argument is, intuitively, valid.

Our basic idea for entailment or implication involves satisfaction conditions of plans and statements. But we haven't considered how to understand conditional directive illocutionary acts like this one:

▷<sup>request</sup>[Sam, if it rains while you are at home, shut the upstairs windows]

or conditional locutionary acts performed with with sentences like this one:

Sam, if it rains while you are at home, shut the upstairs windows.

I will provide a fuller account of conditional illocutionary acts and conditional locutionary acts in chapter 4. For now, I will anticipate some features of that account by noting that a conditional plan is different in important respects from simpler, more straightforward plans. And I will focus on conditional plans which have a statement for their antecedent and a non-conditional plan for their consequent. The consequent plan can be implemented or not, but we won't say this about the conditional plan. Although the conditional plan can't be implemented or fail to be implemented, it can be *satisfied* or not. It is satisfied if it is *sound*: if there is no case where the antecedent is true and the consequent fails to be implemented. So this conditional plan:

Sam, if it rains at 5 pm, shut the upstairs windows.

is satisfied if it doesn't rain at 5 pm, or if it does rain then, and Sam shuts the upstairs windows. And this plan:

Sam, if it rains while you are at home, shut the upstairs windows.

is satisfied if it never rains while Sam is at home, or if every time it rains while Sam is at home, she shuts the upstairs windows.

The implication versions of directive entailment would consider only the logical forms of plans, and the cases of entailment that can be traced to logical form. We should be able to design a logical deductive system for exploring the broadly conceived implication that links sets of statements and plans to plans. The derivations in this system will be the directive versions of deductive derivations. There may not be much importance in doing this, but it would at least be interesting to characterize this implication formally.

Now consider this "argument":

<{Sam, if it rains while you are at home, shut the upstairs windows; Sam is at home; Sam, don't shut the upstairs windows}, It isn't raining.>

For this to make sense, we need to understand the two statements and the second plan to be "indexed" to the same time, and the conditional plan to be indexed to some earlier time. This is a locutionary argument that involves statements and plans, but the conclusion is a statement rather than a plan. Illocutionary arguments are "real life" arguments, they are the kind of arguments that people often make, and frequently address to one another. A directive illocutionary argument must have a directive conclusion, otherwise it wouldn't be directing anyone to do anything. It



seems reasonable to also insist that a directive locutionary argument have a directive locutionary act conclusion. So, then, the argument above isn't a directive argument.

But the argument *is* a locutionary argument that we can consider, and if we use satisfaction conditions to define enlarged conceptions of entailment and implication, then this locutionary argument is valid. (Maybe the argument needs a little tweaking, to insure that the tenses of the verbs are right, but we can all see that this is possible.) The premisses of the argument are inconsistent, in an expanded conception of inconsistency, with the statement that it is raining at the appropriate time in the appropriate place.

However, this is a bizarre argument, only tenuously linked to the kinds of argument that might give someone a reason to accept a statement or to perform an action. It seems scarcely worth considering, because it is a locutionary argument that has no illocutionary counterpart. There are many valid locutionary arguments that do have deductively correct illocutionary argument counterparts. For example, there is a clear sense in which the validity of this illocutionary argument:

<{It either rained or snowed last weekend, It didn't rain last weekend}, It snowed last weekend.>

underwrites the deductive correctness of this assertive illocutionary argument:

⊢It either rained or snowed last weekend. ⊢It didn't rain last weekend.  
So ⊢It snowed last weekend.

And the illocutionary argument is a counterpart to the locutionary argument. However the argument:

<{Sam, if it rains while you are at home, shut the upstairs windows; Sam is at home; Sam, don't shut the upstairs windows}, It isn't raining.>

has no assertive illocutionary argument counterpart. No one would address Sam with the two directive acts, and assert that Sam is at home as a way to support the conclusion that it isn't raining. If a speaker did perform the two directive acts, which is extremely unlikely, and also asserted that Sam is at home, an onlooker could conclude that the speaker must think that it isn't raining. The speaker won't conclude this.

10. DIRECTIVE LOCUTIONARY THEORIES Locutionary acts and illocutionary acts are language acts that people actually perform, although we can represent acts and kinds of acts that no one performs. Representations of language acts can enable us to determine properties of the represented acts. Illocutionary *arguments* are also language acts that people construct or perform. But locutionary arguments are not language acts. These arguments are abstractions that we represent by imagining that we can "put together" or assemble collections or sets of locutionary

acts. We can't do such a thing, for there are no locutionary acts that aren't performed by real persons on actual occasions, but we can still represent acts that haven't been performed, and we can represent sets or collections of these acts, and we can determine that some representations are of valid arguments, and that some others represent invalid ones.

When we consider assertive locutionary arguments, or develop a standard kind of assertive logical theory, we can understand why this is important. We care about truth. We are on the "lookout" for true statements that we can assert, and we are interested in knowing how the truth of some statements requires the truth of others. We want our assertive inferential commitment to track truth in the way it does for the illocutionary system  $S_I$ . (That commitment is based on logical form rather than on "total" semantic structure, but we don't know how to formulate comprehensive deductive systems for establishing results about inferential commitment based on total semantic structure.) If statements  $A_1, \dots, A_n$  imply statement  $B$ , we want, and expect, that asserting  $A_1, \dots, A_n$  will inferentially commit a person to assert  $B$ . But can we say something similar about "directive" entailment or implication, and directive locutionary arguments and directive locutionary theories?

We cannot (truly) say something exactly similar about the directive case. A directive locutionary argument can have a directive locutionary act premiss, while a directive illocutionary argument cannot have a directive illocutionary act premiss. This directive locutionary argument:

<{Mark, get up from your seat and close the door}. Mark, get up from your seat.>

is valid, but the following is not a directive illocutionary argument at all:

$\triangleright^{command}$  [Mark, get up from your seat and close the door]

So  $\triangleright^{command}$  [Mark, get up from your seat]

The "premiss" act does not give Mark a reason to implement the conclusion's plan.

It is easy to mistake this directive locutionary argument:

<{Sam, you have promised that if  $A$ , you will do  $F$ .  $A$  (is the case)}, Sam, do  $F$ .>

for an argument intended to get Sam to do  $F$ , because this directive illocutionary argument:

$\vdash$  Sam, you have promised that if  $A$ , you will do  $F$ .  $\vdash A$  (is the case).

$\triangleright^{request}$  Sam, do  $F$ .

is deductively correct. Though for the argument to be effective, both Sam and the arguer must accept the asserted statements. But the directive locutionary argument is an abstraction that can't

be addressed to Sam by anyone. The locutionary argument must be evaluated on the basis of directive entailment. For the argument to be valid, the conclusion must be satisfied whenever the premisses are satisfied. But the locutionary argument isn't valid, because Sam's being both obligated and committed to do  $F$  doesn't guarantee that she will do  $F$ .

A directive locutionary logical theory doesn't have the same tight connection to a directive illocutionary logical theory that we find in the case of an assertive locutionary theory and an assertive illocutionary theory. But the locutionary theory does help us understand how statements and plans are related to one another, and indirectly helps us to understand directive illocutionary arguments.

With respect to assertive illocutionary acts, we have recognized three associated types of arguments/derivations: locutionary arguments, deductive or semantic derivations, and illocutionary arguments. We have seen that there are directive locutionary arguments and directive illocutionary arguments. It is clear that there are also directive deductive derivations.

Our understanding of directive locutionary acts and directive illocutionary acts shows that we can develop deductive directive locutionary logical theories and deductive directive illocutionary logical theories. These theories should enable us to determine that an addressee who has been directed to implement a given plan has also, in effect, been directed to implement other plans as well. For example, if Mark has been directed to get up from his seat and close the door, he has also been directed to get up from his seat. There is some theoretical interest in developing such theories, but the theories may have little practical value. People don't usually need to carry out logical analyses in order to implement plans they have been directed to carry out.

Deductive directive illocutionary logical theories explore arguments that may have some practical importance. But in trying to get someone to do something, it isn't so often that we are able to show her that she has already agreed to do what she is being directed to do. It is perhaps more useful to show our addressee that she has an obligation to carry out the directed plan, or that carrying out the plan would lead to good results, either for her or for some cause that she supports. Those situations call for non-deductive directive illocutionary arguments.

**11. COMMISSIVE ACTS AND ARGUMENTS** Commissive illocutionary acts also involve plans. In performing a commissive act, a speaker will represent herself as implementing a plan, and she will further commit herself to implement that plan. Some commissives, such as promises, also obligate the speaker to implement the plan that she presents, but not all commissives give rise to obligations. I can simply announce my decision to go out to dinner tonight rather than eating at home. But after a couple of failed attempts to make a reservation, I can abandon my plan, and my commitment, without being liable to criticism.

To have an illocutionary operator for commissive acts, I will also start with the upper case Greek delta. A right-side-up delta will represent the speaker's act of committing herself to do  $S$ :

$$\Delta^{force} [i S]$$

And I will use a lower case ‘I’ for the singular form of the first-person pronoun. There are also first-person plural commissive acts, but for now I will focus on singular acts. A turned-over delta will represent an act whose speaker commits herself not to do *S*:

$$\nabla^{force} [i S]$$

There aren’t many English words for indicating specific commissive forces, perhaps ‘promise’ is the only common one (and promises, unlike other commissive acts, require an addressee, who should be indicated in our notation). But we could use expressions like ‘strong’ or ‘very strong’ to indicate the strength of a commissive that is less than a promise.

Commissive illocutionary acts resemble assertive illocutionary acts in being essentially first-person acts. Like assertive illocutionary acts, commissive illocutionary acts may have an addressee, but they don’t, in general, require an addressee. Though some formal commissives may require addressees. Probably most first-person singular commissive illocutionary acts are accomplished by episodes of verbal thinking that are neither spoken nor written.

There are also the same three kinds of arguments associated with commissives that we have found for assertives and directives. A commissive locutionary argument is similar to directive locutionary arguments, except that in the commissive case, all plans are for the speaker to implement. A commissive counterpart to the directive example above might look like this:

$$\langle \{ \text{If } A, \text{ then I will do } F; A \}, \text{ I will do } F. \rangle$$

This might look like an argument where the arguer infers a conclusion which is a decision to do *F*, but to think that this is such an argument would be to confuse an abstraction with a genuine illocutionary argument. What is represented here is simply a locutionary argument, an abstract ordered pair.

Locutionary commissive acts (which are plans) resemble locutionary assertive acts, which are statements, more than locutionary directive acts do, for the same sentences can often be used to make/perform both commissive and assertive locutionary acts. Vicki’s mother might make a blanket request to members of the household: “Someone needs to make sure that the heat is turned down after everyone is in bed.” When Vicki responds, “I will turn down the heat when I go to bed,” she has performed a commissive illocutionary act which may be a promise. Later, while Vicki is watching TV, and her brother asks if he should turn down the heat, Vicki replies, “I will turn down the heat when I go to bed.” This time, it seems plausible to understand her act to be an assertion.

Both directive and commissive illocutionary acts involve plans. But a directive illocutionary argument tries to get the addressee to implement the conclusion’s plan, by giving the

addressee a reason to implement the plan. If the argument is deductive, the premisses should make clear to the addressee that he is already committed to implement the plan. But the argument won't establish a commitment for the addressee who doesn't already have a commitment. If the argument isn't deductive, the premisses should give reasons for the addressee to implement the conclusion's plan. In a commissive illocutionary argument, no one is trying to get anyone to do anything. Instead, the argument maker is trying to determine what she will do. Her premisses might show the argument maker that she is already committed to carry out the conclusion's plan:

- ⊢ I have promised to close the upstairs windows if it rains while I am at home.
- ⊢ I am at home, and it is raining.
- So, Δ I will close the upstairs windows now.

In this case, the premisses do commit the arguer to implement the conclusion's plan. She was already committed to do that before she made this argument. But the argument might help her to recognize her commitment, and reinforce this commitment, making this commitment immediate.

Ordinarily, performing one directive illocutionary act doesn't commit a person to perform another, and directive illocutionary arguments don't have directive act premisses. But a commissive illocutionary argument can have a commissive act premiss:

- Δ If it rains while I am at home, I will close the upstairs windows.
- ⊢ I am at home and it is raining.
- So, Δ I will close the upstairs windows now.

The first premiss isn't reporting the prior existence of a conditional commitment. The first premiss *establishes* a conditional commitment which applies on any occasion when it rains while the argument maker is at home. The argument applies this general commitment to the circumstances in which the argument is made. The two premisses inferentially commit the arguer to perform the conclusion act, and the conclusion act makes her commitment to shut the windows immediate. The premisses of a satisfactory non-deductive commissive illocutionary argument will give the arguer reasons to implement a plan, but they won't commit him. It then requires a decision on his part to commit himself to implement the plan.

Commissive illocutionary arguments are examples of practical reasoning. That a person is committed to perform a certain act doesn't mean that she will perform that act. She may be unable to perform the act, she may forget her commitment, she may have conflicting commitments which can't all be carried out, or she may find the action she is committed to perform to be distasteful. In the last case, she may then try to find a way to "get out" of her commitment. Still, reasoning about what one will do, or what one should do, often influences what gets done.

12. DIRECTIVE ACTS AND COMMISSIVE RESPONSES A speaker performs a directive illocutionary act in order to get, or influence, the addressee to do or not do something. If the directive is successful, the addressee either does what is directed, or refrains from doing what he

is directed not to do. But issuing the directive is not an action like flipping a switch or pulling a trigger. In order for the directive to succeed, the addressee must *understand* it, and must *agree* to do what is wanted or not to do what isn't wanted. The addressee must, first, make a commitment to comply with the directive, and, second, act or not act in order to "live up" to this commitment. The addressee can commit himself to act without saying anything or thinking any words, but if he expresses his agreement verbally, he will be performing a commissive illocutionary act. (If the addressee is non-verbal about his agreement, we can regard him as tacitly performing the commissive act.)

Addressees don't always agree to do what the directing agent wants. An addressee may *refuse* to carry out the directive, he can reject it. But a person can reject a directive, and still implement the plan proposed. ("I'm leaving, but not because you told me to. I was going anyway.") However, commonly, a person who rejects a directive either doesn't do what is wanted or does do what isn't wanted.

While one or more assertive acts can inferentially commit a person to perform a further assertive act, we don't find this to be the case with directive acts. Ordinarily, when, say, someone commands an addressee to do something, this command does not commit the speaker to make further commands. A person can be committed to perform any kind of intentional act, and so a person can be committed to give an order, make a request, or offer advice. But we don't find interesting or important commitments linking directive acts.

Directive illocutionary arguments are addressed by the arguer to an addressee, and are intended to get the addressee to implement a plan. A deductive directive illocutionary argument is intended to make the addressee realize that he is committed to implement the conclusion's plan, with the further intention that this will influence the addressee to actually implement that plan. A non-deductive directive argument may be intended to get the addressee to realize that he has reasons to implement the conclusion's plan. These reasons might be weaker or stronger, but they won't by themselves commit the addressee to do anything. That requires a decision on the part of the addressee, a decision that doesn't reflect a prior commitment.

13. PRIMITIVE DIRECTIVES AND COMMISSIVES If there are primitive and non-primitive assertions, what about other types of illocutionary acts? Do they have both varieties? Consider directives. The answer is surely "Yes." Just as we recognize both fully developed assertions and primitive assertions, so it must be possible both to make (to issue) fully developed directives and to issue primitive directives. If we model our representation on the earlier one for primitive assertion, then we might represent a primitive directive like this:

$$\triangleright_{\varphi}^{\text{request}} \textit{you}$$

This act requests doing  $\varphi$  of the addressee.

This discussion of primitive directives and an appropriate way to represent them calls to mind Wittgenstein's language game where the builder tells his assistant "Slab" to get the assistant to bring one. The builder is issuing primitive directives with the force of orders, and doesn't use an expression for the addressee. (If he had two assistants, then he might need to say "Chuck, slab" or "Mark, block.")

Just as the speaker does not perform a locutionary act in the course of making a primitive assertion, so she does not perform a locutionary act when she issues a primitive directive. But speakers using plans to issue fully developed directives will perform locutionary acts.

A primitive commissive illocutionary act might be represented like this:

$\Delta_{\text{get a beer from the refrigerator}}^i$

Our discussion of assertive, directive, and commissive illocutionary acts and arguments, and of primitive and more developed illocutionary acts, further articulates the conceptual framework for understanding and dealing with language acts and logical theories. This more fully developed framework provides "room" for new investigations, and some guidance about how they should be carried out. Assertive, directive, and commissive illocutionary acts and arguments resemble one another in several respects. For each of the three categories, we recognize locutionary acts and arguments, deductive derivations, and illocutionary arguments. The ways in which acts in the different categories resemble and differ from one another help us to understand the acts, arguments, and derivations in each of the three categories of illocutionary acts. In the remainder of this book, our focus will be assertive illocutionary acts and the various kinds of deductive arguments and derivations associated with assertive acts. But I will sometimes appeal to features of directive and commissive acts to support or illuminate our treatment of assertive acts.