

THE LARGER LOGICAL PICTURE

1. ILLOCUTIONARY ACTS In this paper, I am concerned to articulate a conceptual framework which accommodates speech acts, or language acts, as well as logical theories. I will sketch a landscape which identifies topics and areas to be explored. Some of these have been explored already, but many have not. Developing this framework is preliminary to working out theories for the unexplored parts, because the framework itself furnishes guidance for doing this.

A language act is a meaningful act performed by saying something, or writing something, or even thinking something with words and sentences. *Illocutionary acts* are the fundamental kind of language act. A typical illocutionary act is performed by someone's using a sentence or a sentential clause to say something meaningful, and doing this in a certain manner or with a certain force, like the force of an assertion, a request, or a promise. Illocutionary acts are the complete concrete language acts of which significant speech is composed.

John Searle's taxonomy of illocutionary acts recognizes five major categories of these acts, and three of these categories are relevant to this paper. These are *assertives*, *directives* and *commissives*. Mike's assertion that the square root of 2 is a rational number is an *assertive illocutionary act*. So would be his denial that the square root of 2 is rational, or his act of supposing that the square root of 2 is rational, or his act of supposing that the square root of 2 is not rational. What is asserted, denied, or supposed in these illocutionary acts is the *statement* that the square root of 2 is rational. A statement is an act performed with a sentence or sentential clause that can appropriately be evaluated in terms of truth and falsity. Statements are *locutionary acts*. Performing a statement with the force of an assertion would constitute an assertion.

In a *directive illocutionary act*, a speaker or writer tries to get her addressee to do or not do something. She might, for example, order her addressee to shut the door, or ask her addressee to shut the door, or advise him to shut the door. The locutionary act that is abstracted from a directive act, and that is performed with a specific force to constitute the directive act is a *plan* for the addressee to *implement*.

A plan is a speech act like "Mark, please close the door" or "Rosemary, answer the phone," and represents the addressee as performing the directed act. Just as statements have truth conditions which are satisfied or not, so plans have *implementation conditions* for which we will also speak of satisfaction. If a directive act has the desired effect on its addressee, that addressee will, first, *agree* to implement the directive's plan, and, subsequently, will implement the plan.

A directive illocutionary act is an performed by a speaker to get her addressee to implement a plan, after that addressee first commits himself to do this. A *commissive illocutionary act* is also concerned with implementing a plan. In the commissive case, the speaker commits *herself* to implement a plan. For example, a person might say, or think, "I will get a bottle of beer from the refrigerator." Or she might say to her friend, "Rosemary, I will meet you for lunch on Thursday, at one o'clock at Lombardo's restaurant. I'm paying, and that's a promise."

Commissives resemble directives in having locutionary components that are plans, although the commissive plans are first-person while the directive plans are second-person. Commissives resemble assertives in that both kinds of act may have addressees, but addressees are not required. Someone can make an assertion or a decision when she is alone. But addressees are essential for directive acts.

Searle has argued for the non-importance of locutionary acts, either because they don't exist or because they are mere abstractions as opposed to the complete concrete illocutionary acts. Locutionary acts certainly exist, as I illustrated by writing "The square root of 2 is a rational number." But Searle is right that, ordinarily, locutionary acts are abstract components of illocutionary acts. However, this doesn't mean that locutionary acts are of no importance. For example, statements and features of statements are the focus of attention for most standard theories of deductive logic.

Actual language acts are performed by particular people on particular occasions. But different people can perform language acts that are essentially similar to one another. This makes it convenient to consider those different people to be performing the same acts, as when we say that each of us can make the statement that the square root of 2 is rational. But while different people can make the same statements, they can't perform the same illocutionary acts. Each person's illocutionary acts are uniquely her own.

2. ARGUMENTS AND DERIVATIONS Three kinds of argument or derivation are associated with each of the three categories of illocutionary acts. To explain these, I will begin with assertive acts. Assertions, denials, and suppositions are fundamental kinds of assertive acts. Someone's *assertion* is constituted by her making a statement and accepting that statement as representing what is the case. Denials reject statements for failing to represent what is the case, and suppositions either temporarily accept statements or temporarily reject them. A person makes suppositions in constructing an argument, and suppositions are frequently discharged in the course of that argument.

An assertive *locutionary argument* is an ordered pair whose first member is a set of statements, the premisses, and whose second member is the conclusion statement. Locutionary arguments are abstractions which we can represent and evaluate, but they are not arguments that a person can actually make or address to someone else. An assertive locutionary argument is *valid* iff its premisses entail or imply the conclusion.

It is common to show that a locutionary argument is valid by constructing a *deductive derivation* tracing truth conditional connections from some premisses to the conclusion of the argument. Although such derivations are often called arguments, or proofs, I prefer the term 'derivation.' Locutionary arguments and deductive derivations are distinct from *illocutionary arguments*, in which a person reasons from premisses which are illocutionary acts to an illocutionary act conclusion. Assertive illocutionary arguments are the "real life" arguments that someone uses to explore or extend her own knowledge and belief, or to convince someone else to

accept or deny a given statement. In spite of this, standard accounts of deductive logic are almost exclusively concerned with locutionary arguments and deductive derivations.

Deductive illocutionary arguments are based on *rational commitment*: a simple assertive illocutionary argument is *deductively correct* if performing the premiss acts commits the arguer to perform the conclusion act. A complex assertive illocutionary argument is deductively correct if its component arguments are deductively correct, and its initial undischarged premiss acts commit the arguer to perform the conclusion act.

Rational commitment is a person's commitment to do or not do something, or to remain in a certain state like that of accepting a given statement. Deciding to perform an act will commit a person to perform that act, and sometimes performing one intentional act commits a person to perform another. This commitment is either conditional or unconditional, and is either immediate or mediate; what makes someone's commitment immediate is that it is evident to her if she gives the matter some thought.

The *inferential* commitment characteristic of assertive illocutionary acts is not a commitment to carry out reasoning, but is instead a commitment to recognize and follow certain links *when* carrying out deductive reasoning. My assertion that today is Wednesday inferentially commits me to assert that the day after tomorrow is Friday. The Wednesday assertion doesn't require me to give any thought to the following days, but my assertion commits me to grant, or concede, that the day after tomorrow is Friday, if the matter comes up.

3. DIRECTIVE ARGUMENTS The logical theory of directive acts is sometimes called imperative logic, but it is misleading to label the theory with the name of one of its proper parts. It is the truth or satisfaction conditions of statements which provides a basis for speaking of entailment or implication linking some statements to others. In an analogous fashion, the implementation or satisfaction conditions of plans allow us to speak of entailment or implication linking some plans to others.

A set of plans for a single addressee *weakly entails* a further plan for that same addressee if any way of implementing the first plans will also implement the further plan. This is not such an interesting relation, because if Mark has been asked to *mail a letter*, and he complies, he has also implemented the plan 'Mark, mail this letter or burn it,' although he has *not* been asked to implement the disjunctive plan.

A plan, "Mark, do *F*" *weakly entails* the plan "Mark, do *F* or do *G*." To have 'Mark, do *F*' strongly entailing 'Mark, do *G*,' we need the first plan to weakly entail the second, and, additionally, we need implementing the second plan to be part of what is involved in implementing the first. For example, 'Mark, get up from your seat and shut the door' strongly entails 'Mark, get up from your seat.' One project for directive logic is to adequately characterize or explain strong entailment.

Since plans and sets of plans can entail other plans, there are locutionary arguments from plan premisses to plans as conclusions. Consider this directive locutionary argument:

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

(The ordered pair notation is what marks this as a locutionary argument.) This is valid, because the premiss strongly entails the conclusion. But this is not an argument addressed to Mark. The premiss does not give Mark a reason to implement the conclusion. We focus on arguments like this in order to investigate entailment relations linking some plans to others.

We should notice that the premisses of directive locutionary arguments can include statements as well as plans. The following is an example:

<{Mark, if it rains, close the windows, It is raining}, Mark, close the windows.>

To evaluate this argument, we need to consider both truth conditions and implementation conditions, and we need to provide an account of conditional plans and their impact on implementation. Since truth conditions and implementation conditions are both *satisfaction conditions*, we should probably define validity in terms of satisfaction.

This most recent locutionary argument might easily be confused with an argument whose premisses give Mark a reason to implement the conclusion. But that would be to regard the locutionary argument as an illocutionary argument. As well as considering directive locutionary arguments, it should also be possible, though perhaps not very interesting, to carry out deductive derivations tracing truth and implementation condition connections linking premisses of directive locutionary arguments to their conclusions.

If an assertive locutionary argument is valid, and someone knows or believes the premisses of that argument, then that person should be able to construct a deductively correct assertive illocutionary argument from those assertions to the assertion of the locutionary argument's conclusion. The situation is different with directive arguments. A speaker cannot so easily transform a strongly valid directive locutionary argument like this:

<{Rachel, water the lawn every day next week}, Rachel, water the lawn next Thursday.>

into a deductively correct directive illocutionary argument. For such an argument should begin with assertions, and make clear to the addressee who accepts the asserted statements that she is already committed to implement the conclusion's plan. An example is the following:

Rachel, you have agreed to water the lawn every day next week. So be sure to water the lawn next Thursday.

The premiss is an assertion, and the conclusion is a directive illocutionary act.

Directive illocutionary arguments are intended to give their addressees reasons to implement their conclusions' plans. The strongest reasons from a logical point of view are provided by deductive arguments which make clear that the addressee is already committed to implement the conclusion's plan. These strongest reasons can't *make* the addressee implement that plan, but they can show the addressee that he committed himself to implement it. Non-deductive directive illocutionary arguments will provide stronger or weaker reasons to implement the conclusion's plan, but they *invite* the addressee to make a commitment instead of showing that the commitment is already "in force."

It is instructive to compare the deductively correct argument above with the following directive illocutionary argument:

Mark, you are morally obliged to close the windows if it rains while you are at home. It is raining now, and you are at home. So close the windows.

This most recent argument is not deductively correct, because obligation is not commitment. Being obliged to close the windows seems to me to be a good reason for closing them, but this doesn't mean that Mark must already be committed to do so.

Considering the different types of illocutionary acts and their associated arguments and derivations enables us to look for, and to recognize, parallels between the different types of acts and arguments. For example, we might wonder whether the distinction between strong and weak entailment that we find in directive locutionary arguments is also reflected in a distinction between strong and weak entailment relations linking statements, and whether any such distinction is important for assertive acts.

4. COMMISSIVE ARGUMENTS In performing a directive illocutionary act, a speaker attempts to get her addressee to implement a plan, after the addressee first commits himself to do this. In a (sincere) *commissive illocutionary act*, the speaker (writer, thinker) commits *herself* to implement a plan.

For commissive acts, there are also locutionary arguments, deductive derivations, and illocutionary arguments. The premisses of a commissive locutionary argument can either be all plans or a mixture of plans and statements, and the premisses of a commissive illocutionary argument can be assertive illocutionary acts (assertions and denials) or commissive illocutionary acts. Someone's *directive* illocutionary argument can make clear to an addressee that he is (already) committed to implement a plan, but such an argument cannot commit the addressee to do anything. With commissive illocutionary arguments, the premisses can either show that the arguer is already committed to implement the conclusion's plan, or they can actually commit the arguer to implement that plan.

In this illocutionary argument:

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

the premisses show to the addressee that she has a prior commitment to close the windows, while in this argument:

I will close the windows if it rains while I am at home. But it is raining, and I am at home. So I will close the windows now.

it is the commissive premiss together with the assertive premiss which give rise to the commitment to close the windows. Commissive illocutionary arguments, both deductive and non-deductive, are used to carry out *practical reasoning*.

In all three of the categories of illocutionary acts that we are considering, there are three associated types of argument/derivation. The locutionary arguments are valid or not, the deductive derivations are sound or not, and the illocutionary arguments are deductively correct or not. Deductive correctness depends in one way or another on rational commitment. Although I have been focusing on deductive arguments and derivations, there are three analogous types of non-deductive arguments and derivations. In actual practice, or “real-life” situations, only illocutionary arguments play important roles. For illocutionary arguments are the arguments that occur outside of logic books and logic classes.

It is clear that locutionary acts are important primarily because of the illocutionary acts they are used to constitute, and that locutionary arguments and deductive or semantic derivations are important because of their relevance for illocutionary arguments. It is unfortunate that illocutionary arguments have received so little attention. But the conceptual framework that has been articulated here highlights some tasks that remain to be carried out, and provides some guidance as to how this can be done.