STALNAKER, Robert C., Inquiry. Bradford Books, The MIT Press, 1984.

The author of this book is presumably best known as one of the founders (together with David Lewis; see David Lewis, 1973)) of the possible world theory of conditionals and counterfactuals. Developed at the end of the sixties, their ideas have been applied by a number of authors for the clarification of problematic concepts such as counterfactual dependence, causation, explanation an probability. The possible world framework seemed to be a very valuable tool for the analysis of such cumbersome concepts.

In the present book, Robert Stalnaker takes the possible world framework as a prism to look at some problems in the theory of knowledge and the philosophy of mind. He especially focuses on the concepts of intentionality, belief, conditional belief and inquiry.

The book may be clustered into two parts. The first part is concerned with the so-called problem of intentionality and the strategies for solving this problem (chap. 1, 2), the moderate realism in connection with possible worlds (ch. 3) and the concept of belief and belief attribution (ch. 4). The second part is mainly devoted to the way beliefs change in response to new information. There is a chapter about the problem of deduction (ch. 5), methodological policies of changing beliefs (ch. 6) and conditional propositions and realism about counterfactuals (ch. 7, 8).

The main topic in the first part of the book deals with the problem of intentionality: this is in essence a problem about the nature of intentional or representational mental states. According to Stalnaker, it is the central philosophical problem that an account of mental representation must solve. The problem of intentionality is a problem about the capacity of representing. One can micture, describe, or think about things that even don't exist; representations may even determine behaviour. How is this possible? Furthermore, inentional or representational relations (i.e. relations between a system and its representations) seem unlike the relations holding between things and events in the natural world. What are these relations?

Stalnaker does not give a straightforward answer to these questions, he rather argues in favour of a strategy which must be followed in order to solve the problem of intentionality. A pragmatic strategy is proposed which, as a fundamental idea, holds that the primary objects of attitude are not propositions, but are the alternative possible outcomes of the agent's actions. More generally: the objects of attitude are the alternative possible states of the world, i.e. possible worlds. According to this point of view, propositions are simply ways of distinguishing between possible worlds and they are useful for characterising and expressing an agent's attitudes toward those possibilities. The pragmatic strategy claims that the representational mental states should be understood primarily in terms of the role they play in the characterization and explanation of rational action.

States of the mind such as belief and desire are dispositional properties, which means that they have a tendency to bring about, and they therefore are

real causal properties of rational agents. This enables us to make predictions and explanations about how a person will behave in certain stiautions and why he behaves the way he does. Furthermore, mental states are also indications of the external world: "our mental states represent what they represent not only because of the behaviour they tend to cause, but also because of the events and states that tend to cause them" (p. 18).

In attributing beliefs and desires, certain kinds of internal causal properties are attributed which have a structure that tends to reflect the world in ways that make it appropriate to call them representations. Stalnaker remains however neutral on the form that those representations must take. The possible world framework gives an account of the structure of what is represented while leaving open the questions about the means by which this is accomplished. Contrary to the so-called linguistic strategy, the pragmatic strategy makes no reference to language. Unlike the linguistic strategy, which holds that the intentionality of mental states can be explained in terms of the intentionality of linguistic expressions, the pragmatic strategy holds that the language is to be explained in terms of the intentionality of the mental states.

The primary objects of attitude are not propositions but possible worlds i.e. ways things might have been. What are those possible worlds? Stalnaker argues in favour of a moderate realism with respect to these things. Possible worlds are conceived just as real as the actual world though, they do not actually exist. Because "actual" is indexical, like "I" of "now", it depends for its reference on the circumstances of utterance. Moderate realism denies however, unlike the extreme realism of David Lewis, that the entities of those possible worlds are concrete particulars or at least entities which are made up of concrete particulars and events. Possible worlds, says Stalnaker, are not concrete objects or situations, but abstract objects whose existence is inferred or abstracted from the activities of rational agents. The nature of possible worlds is left open.

Chapter four discusses the relation between belief states and the belief attributions that describe them. The central idea is that belief attributions parallel statements, while the belief state of a person, i.e. the mental state of the person in virtue of which the attribution is true, is something with a completely different form: a belief state can be represented as a set of possible worlds. To believe that P is simply to be in a belief state which lacks any possible world in which P is false (pp. 68-69). The central idea is again that a state of knowledge or belief should not be thought of as something with propositions as components at all. Attitudes are primarily attitudes to possible states of the world and not to propositions that distinguish between those states.

The second half of the book deals with the more dynamical aspects of inquiry. The concept of acceptance defined as a generic propositional attitude concept with such notions as presupposing, presuming, postulating, positing, assuming and supposing as well as believing falling under it, is central to it. Stalnaker thinks of an inquirer as a person in an initial acceptance state prepairing to perform some actions which are intended to lead to a change in that stage. An acceptance state is then conceived as a nonempty set of possible situations and the set of propositions accepted contain just those propositions that are true in all of these possible situations. Stalnaker claims that three deductive conditions on the set of propositions determined by an acceptance state must hold: (i) if P is a member of a set of accepted propositions, and P

entails Q, then Q is a member of that set, (ii) if P and Q are each members of a set of accepted propositions, then P&Q is a member of that set, and (iii) if P is a member of a set of accepted propositions, then not-P is not a member of that set. Conditions (2) and (3) must be restricted to the set of propositions that are determined by single belief states. An agent my be at one time in separate, even incompatible belief states, believing both a proposition and its contradictory, he would not therefore believe everything.

The goal of inquiry, then, is the acquisition of knowledge (about the world as well as mathematical knowledge). Inquiry in general is the process of changing acceptance states, it is a matter of adjusting one's beliefs in response to new information. Deductive inquiry is one specific form of inquiry, which engages for the putting together of separate systems of beliefs. Inquiry involves methodological policies that constrain changes. Stalnaker conceives them as change functions, which take propositions into new acceptance states. In other words, a change function represents the agents dispositions to change what he accepts in response to new information. Different change functions are always grounded in different factual beliefs. In fact, belief states or epistemic situations have two closely related components: a set of possible worlds representing the agent's conception of the way the world is (i.e. an acceptance state) and a change function (i.e. a methodological policy to change).

Conditional sentences are used to express our methodological policies and Stalnaker proposes therefore that natural necessities should be explained as projections of epistemic principles and practices onto the world. This is a full-fledged Humean approach as the reader will notice. However, Stalnaker warns thereader that there is a difference between conditional belief and belief in conditional propositions. Conditional belief may be identified with an agent's rational dispositions to change what he accepts, while conditional propositions are used to make factual claims.

Finally, in chapter 7, the formal theory of conditional propositions in terms of the semantics of possible worlds is proposed and compared with some of its competitors (especially Lewis) and in chapter 8 there is a clarification of the issue between realism and antirealism with respect to counterfactuals.

I conclude this review with a critical remark concerning the problem of intentionality. The author proposes a pragmatic strategy in which belief states are conceived as dispositional properties. Belief states thus have an internal causal property which, under certain appropriate conditions are disposed to bring about an output-response. According to Stalnaker, those causal properties are internal representations of beliefs and they represent the structure of beliefs in terms of possible worlds. The form that those representations must take is left open. However, Stalnaker cannot deny that internal representations must have a form and when we are in a certain representational state, we have a form, called a symbolic expression or a code (Pylyshyn 1984), in some part of the memory that encodes the reference to possible worlds and that can enter into causal relations. But speaking of a symbolic expression or form, no matter how it is accomplished, involves a kind of language called "mentalese" or "language of thought". So I do not see why the pragmatic picture rules out the linguistic account. Close considerations may reveal their compatibility.

The general impression that one gets by reading this book is that it provides the reader with a number of challenging ideas, perspicuous remarks and

elaborated polemics. I would recommend it to everyone who is interested in the enterprise of forming, testing and revising beliefs. The book has however a number of weakpoints which, I think, may be due to the fact that the theory is only in an initial state of development. A number of problems are raised for which only a strategy in very impressionistic pictures is proposed and together with the number of elaborated polemics, this does not contribute to the accessibility of the book.

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REFERENCES

LEWIS, David (1973), Counterfactuals, Oxford: Blackwell.
PHYLYSHYN, Zenon W. (1984), Computation and Cognition, Cambridge: The
MIT Press.