

1.1.1. Logic

Logic is a study of reasoning. However, it does not concern the ways and means by which people actually reason—as psychology does—but rather the sorts of reasoning that count as good. So, while a psychologist is interested as much in cases where people get things wrong as in cases where they get them right, a logician is interested instead in drawing the line between good and bad reasoning without attempting to explain how cases of either sort come about.

Another way of making this distinction is to say that, in logic, the point of view on reasoning is *internal*, a study “from the inside” in a certain sense. As we study reasoning in this way, we will be interested in the norms of reasoning—the rules that reasoners feel bound by, the ideals they strive to reach—rather than the mixed success we observe when we look from outside on their efforts to put norms of reasoning into practice.

This makes logic a ***normative discipline***—that is, one whose laws say how things ought to be—rather than a descriptive or explanatory discipline. But there is more than one sense in which a discipline might be seen as normative. Logicians might ask what sorts of reasoning are simply good or, more likely, are good in particular contexts or for particular purposes. But, while they do sometimes ask such questions, logicians more often study features of reasoning that are valued without asking why they are of value.

Now, a study of that sort does not have to be a normative one: chemists may study properties, such as insolubility, that are valuable for certain purposes without that making chemistry a normative discipline. Of course, as a pure science, chemistry does not study properties like insolubility *because* they are valued. But an analogous applied discipline would do this. For example, paint and varnish chemistry will study insolubility because it is valuable property for paints and varnishes to have, and that does not make paint and varnish chemistry a normative discipline.

However, the valuable properties studied in logic are themselves normative in a way that insolubility is not. A comparison with grammar (or the theory of syntax) may help here. A linguist studying the grammar of a language will be interested in the sort of things people actually say, but only as evidence of the ways they

think words ought to be put together. So, although linguists do not attempt to lay down the rules of grammar for others and see their task as one of description rather than prescription, what they attempt to describe are the (largely unconscious) rules on the basis of which the speakers of a language judge utterances as grammatical or ungrammatical. This means that the study of grammar is normative because its rules prescribe what is required for sentences to be grammatical even if grammarians themselves do not.

One way of putting this would be to say that logic and grammar are disciplines that describe but what they describe are rules or norms. What makes them normative rather than descriptive is that they describe the norms from the inside. Their laws do not generalize about the ways someone who holds such norms will behave but instead state the norms themselves. To cite another example where similar issues arise, someone studying Roman law might do so in the style of a descriptive or explanatory discipline by describing or even trying to explain the operation of the courts or the behavior of the populace, but the study of Roman law has often been normative, attempting to state the content of Roman law as a Roman jurist might have. And it is clear that no one now can really intend to prescribe the law of Rome.

Once the point is seen in this case it can be seen to hold when the law of any state is stated by someone who does not have the legislative or judicial authority to prescribe the content of the law. Logicians and grammarians also lack the authority to prescribe the norms of logic and grammar, not because someone else has it but because no one does. It would be a mistake to place too much emphasis on the contrast between logic and grammar on the one hand and the law on the other because no one has the final authority to prescribe the norms of law either since the authority of legislators and judges depends on the law. The key point is what the study of logic, grammar, and the law share, a normative character that consists in the non-prescriptive statement of rules.

Although such a normative study need not ask the reason for the value of the qualities recognized by the norms it states, one way of understanding the source of logical value suggests that there is more than an analogy between logic and the study of language. However ineffable language itself may sometimes seem, it is vastly

more concrete than thought and it has provided logicians with a support for and stimulus to reflection. In the 20th century it acquired an even greater significance because the traditional view of the relation between thought and language (according to which thought is independent of language and language acquires its significance as the expression of thought) came to be reversed, with the significance of thought being seen to derive from the possibility of linguistic expression. As a result, the norms of thought have often been seen to derive from the norms of language, specifically from rules governing certain aspects of meaning. This view is not uncontroversial, but we will see in 1.2 that there is a way of describing the norms of reasoning that we will study that makes it quite natural to see them as resting on norms of language.

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