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Toward a Universal Moral Grammar

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Our research is organized around three questions, strict analogues of the fundamental questions in Chomsky's (1986) framework.

- (1) What constitutes moral knowledge?
- (2) How is moral knowledge acquired?
- (3) How is moral knowledge put to use?

Focusing first on (1), we propose that one component of moral knowledge, deontic knowledge, is a mental structure consisting of a system of rules and principles that generates and relates mental representations of various types. This system is what enables individuals to distinguish actions that are morally permissible from those that are not.

Like grammaticality judgments, permissibility judgments do not depend on the superficial properties of an action-description but on the way an action is mentally represented. Drawing primarily on Goldman's (1970) notion of *level-generation*, we argue that the latter can be described in terms of a hierarchical sequence of act-token representations – an *act tree* – which encodes whichever information is relevant to determining an action's deontic status. Employing this technique, we formulate a “fragment of moral grammar” capable of accounting, in an explicit and rigorous fashion, for a series of otherwise puzzling commonsense moral intuitions, including those occasioned by the “trolley problem” examples invented by Foot (1967) and Thomson (1986).

Unlike Kohlberg (1981), we distinguish sharply between a person's *operative* moral principles (those principles actually operative in the exercise of moral judgment) and her *express* principles (those principles verbalized by a subject in an effort to justify or explain her judgments). We make no assumption that the normal individual is aware of the operative principles which constitute her moral knowledge, or that she can become aware of them through introspection, or that her statements about them are necessarily accurate. On the contrary, we hypothesize that just as normal persons are typically unaware of the principles guiding their linguistic intuitions, so too are they often unaware of the principles guiding their moral intuitions. The universal and invariant aspects of moral

knowledge, therefore, are often obscure to those who engage in ethical debates.

Turning to (2), the fact that at least some operative moral principles are inaccessible to consciousness suggests that, as is the case with language, these principles are not taught to successive generations explicitly. We therefore propose that they are the developmental consequences of an innate, cognitive faculty.

In our poster, we report the results of three experiments conducted on a total of 125 subjects, men and women ages 18-60. In each experiment, we elicited permissibility judgments for a variety of action-sequences. In accord with our expectations, subjects' deontic judgments about these actions were widely shared, irrespective of gender. They were consistent with the predictions of our act trees. The subjects' expressed principles, on the other hand, were widely divergent. Finally, the subjects were consistently incapable of articulating the operative principles on which their judgments were based. They often appeared puzzled by the nature and strength of their intuitions and by the way those intuitions shifted when we introduced small changes in the wording of the action-sequences in order to evoke distinct act-token representations.

Our findings suggest that long-standing questions in moral epistemology can be fruitfully investigated from a perspective similar to that adopted by linguists. These findings prepare the way for future studies on the nature, acquisition, and use of moral knowledge.

References

- Chomsky, N. (1986). *Knowledge of language: Its nature, origin and use*. Westport, CT: Praeger.
- Foot, P. (1967). The problem of abortion and the doctrine of double effect. *Oxford Review*, 5, 5-15.
- Goldman, A. (1970). *A theory of human action*. Princeton: Princeton University Press.
- Kohlberg, L. (1981). *Essays in moral development. Vol 1: The philosophy of moral development*. San Francisco: Harper & Row.
- Thomson, J. (1986). *Rights, restitution, and risk*. Cambridge: Harvard University Press.