

Statements in which some value predicates occur essentially and some others occur inessentially may be called mixed statements.

3. Positive and Negative Value Predicates and Their Connection with Gödel's Ontological Proof

3.1 Permission of Neutral Value Predicates

We assume that value predicates can be positive or negative or neither, i.e. neutral. Like on a scale of temperature a middle domain may be called neither warm nor cold.

Accordingly, we assume the following postulate (where ' W ' is a value predicate, ' \overline{W} ' is its contrary opposite, and ' P ' is the second-order predicate positive):

Post G $(\forall W)(P(W) \rightarrow \neg P(\overline{W}))$
 If W is positive, then it is not the case that \overline{W} is positive.
 From this it follows by contraposition:
 If \overline{W} is positive, then W is not positive.

However, we do not also assume the opposite implication of Post G, i.e. \nleftrightarrow ; since this would rule out neutral value predicates.

3.2 Connection with Gödel's Ontological Proof

3.21 Relaxing Axiom 2

As has been mentioned at the beginning, Gödel has relaxed his axiom 2 (of his Ontological Proof) later according to a remark in "MAX PHIL XIV"⁴: "It need *not* be assumed that always either y or $\sim y$ is positive." This remark seems important concerning the interpretation of Gödel's Ontological Proof: as Anderson⁵ has pointed out, only Post G or its analogue for arbitrary properties is required for Gödel's Ontological Proof; the opposite direction is required for the proof that all truths are necessary truths, a theorem which Sobel⁶ and others attribute to Gödel's Ontological Proof.

⁴ Gödel K., "MAX PHIL XIV", p. 106, *Collected Works Vol. III*, Gödel K., eds. Feferman S. et al., Oxford, Oxford Univ. Press, 1995, p. 435.

⁵ Anderson C.A., "Some Emendations of Gödel's Ontological Proof", *Faith and Philosophy* 7, 1990, p. 291-303. Cf. Adams R.M., "Introductory note to *1970", *Collected Works Vol. III*, Gödel K., eds. Feferman S. et al., Oxford, Oxford University Press, 1995, p. 401.

⁶ Sobel J.H., "Gödel's Ontological Proof", *On Being and Saying: Essays for Richard Cartwright*, ed. Thomson J.J., Cambridge, Mass, MIT Press, 1987, and Sobel J.H., *Logic and Theism. Arguments For and Against Beliefs in God*, Cambridge, Cambridge Univ. Press, 2004, p. 134.

Sobel reaches that consequence called the “modal collapse” via a strong abstraction principle which seems not to be used or presupposed by Gödel for his Ontological Proof. But independently of that some worries concerned with the modal collapse seem to be based on some misunderstanding or confusion.

3.22 *The Modal Collapse*

The big fuss about the so-called “modal collapse” is rather unnecessary in the following sense. Forget all existing systems of modal logic and their axioms. Assume only the usual interdefinability between *possible* and *necessary* (necessary = not possible not) and Aristotle’s definition of contingency: possible p and possible not- p . Let p represent the state of affairs: God exists. Since this state of affairs is not contingent we have $\neg(\Diamond p \wedge \Diamond \neg p)$ which is: either impossible $p(\neg \Diamond p)$ or necessary $p(\Box p)$. From this it follows (by Propositional Logic): $\Diamond p \rightarrow \Box p$; i.e. a strong form of the modal collapse. This shows first that the so-called “modal collapse” has nothing to do with any specific system of modal logic. We don’t need any axiom of such logics to derive it. Secondly it shows that the “modal collapse” is connected with proofs of the existence of God in the following sense: when focusing on God and his essential properties – thereby abstracting from creation and his relations to creation – there is no contingency. Thus this type of modal collapse being due to non-contingency has to hold for God’s essence and essential properties, i.e. for everything which comes from his nature. This leads to the necessary distinction elaborated in the next section.

3.23 *Distinction between God’s Properties Concerning Himself and His Essence (Nature), and Concerning His Relation to His Creation*

According to the three Abraham-religions, Judaism, Christianity and Islam, God’s creation is not a necessary outcome of his essence or nature, but the result of his free will and love. Consequently not every positive property (for example that of creating) follows from his essence or essential properties as the unrestricted definition $D2$ of Gödel’s Proof says. However, Gödel was aware of this problem and apparently understood the positive properties in a restricted way as shown by his remark:

“Positive means positive in the moral aesthetic sense (independently of the accidental structure of the world). Only then the ax. are true. It may also mean pure “attribution” as opposed to “privation” (or containing privation).”⁷

An appropriate restriction taking care of this distinction has been proposed by Anderson⁸ with his definition $D2^*$ (replacing definition $D2$ of Gödel’s Proof) which permits only essential properties as entailed by God’s essence; another one was

⁷ Gödel K., *Collected Works Vol. III*, eds. Feferman S. et al., Oxford, Oxford Univ. Press, 1995, p. 404. Cf. also 400f. of Adams’s commentary (Adams R.M., “Introductory note to *1970”, *Collected Works Vol. III*, Gödel K., eds. Feferman S. et al., Oxford, Oxford University Press, 1995, p. 388-402).

⁸ Anderson C.A., “Some Emendations of Gödel’s Ontological Proof”, *Faith and Philosophy* 7, 1990, p. 295.

proposed by Czermak⁹ who restricts the positive predicates (representing positive properties) by a subset of them, the *T*-predicates (representing *T*-properties). For these *T*-properties it holds for example that they are immutable since they are perfections which would turn to the worse by any kind of change.

The above distinction and the appropriate restrictions of Anderson and Czermak avoid Sobel's special modal collapse: that God's knowledge of a contingent true proposition *p* (for example a proposition about the world) is a property of God such that *p* is true and this property must be necessarily exemplified so that it is necessarily true. Since by the restrictions not every property follows from God's essential properties, this conclusion and the respective special modal collapse (that every proposition is necessarily true) is avoided.

In addition to that, Sobel seems to be confused in another way concerning God's knowledge about his creation: a contingent proposition about his creation is not a necessary (or essential) property of God. Since his creation is not a necessary outcome of his essence. He might necessarily know that something is true and contingent. But from the necessity of knowing it does not follow that what is known is necessary; this would be a confusion of $\Box Kp$ and $K\Box p$.

Benzmüller and Woltzenlogel have given different computer assisted proofs of Dana Scott's version of Gödel's Proof which show the logical correctness.¹⁰ They did not apply such methods however to proofs with the kind of restrictions proposed by Anderson or Czermak. It is to be hoped that further research is done in this direction.

4. Different Types of Evil¹¹

We shall first classify three general types of evil. The first two types (*E1* and *E2*) are applicable to a very wide domain. The third type (*E3*) characterizes evil in a derived sense as standing in a certain relation to *E1*.

4.1 General Types of Evil

Def 10 An evil *E1* is some lack, defect or privation of some particular good which ought to be present in a subject or organism.

Def 10.1 An evil *E2* is some lack, defect or privation of some particular good which is accepted to be absent in order to achieve another higher good.

⁹ Czermak J., "Überlegungen zum Thema: Gott und Logik", *Neuer Atheismus wissenschaftlich betrachtet*, eds. Anglberger A.J.J./Weingartner P., Frankfurt, Ontos, 2010, p. 246ff.

¹⁰ Benzmüller Ch./Woltzenlogel B.P., "Formalization Mechanization and Automation of Gödel's Proof of God's Existence", *arXiv: 1308.4526v4[cs.LO]*, 10Sept2013.

¹¹ For a detailed discussion of different types of evil, see Weingartner P., *Evil. Different Kinds of Evil in the Light of a Modern Theodicy*, Frankfurt, Peter Lang, 2003, chs.1 and 2.