

Godöl's Proof of the Existence of God

		Symbol	Meaning
Axiom 1	$\Box \forall x [\phi(x) \rightarrow \psi(x)] \wedge P(\phi) \rightarrow P(\psi)$	$P(\phi)$	ϕ is a positive property
Axiom 2	$P(\neg \phi) \leftrightarrow \neg P(\phi)$	$G(x)$	'x' has the property of being God
Theorem 1	$P(\phi) \rightarrow \Diamond \exists x [\phi(x)]$	$\Box$	a necessary truth
Defn. 1	$G(x) \Leftrightarrow \forall \phi [P(\phi) \rightarrow \phi(x)]$	$\Diamond$	a contingent truth
Axiom 3	$P(G)$	$\rightarrow$	implies
Theorem 2	$\Diamond \exists x G(x)$	$\forall$	for all
Defn. 2	$\phi \text{ ess } x \Leftrightarrow \phi(x) \wedge \forall \Psi \{ \Psi(x) \rightarrow \Box \forall x [\phi(x) \rightarrow \Phi(x)] \}$	$\exists$	there exists
Axiom 4	$P(\phi) \rightarrow \Box P(\phi)$	ess x	the essence of x
Theorem 3	$G(x) \rightarrow G \text{ ess } x$	$\neg$	not
Defn. 3	$E(x) \Leftrightarrow \forall \phi [\phi \text{ ess } x \rightarrow \Box \exists x \phi(x)]$	$\wedge$	and
Axiom 5	$P(E)$	$\Leftrightarrow$	if and only if
Theorem 4	$\Box \exists x G(x)$ (there exists x such that x has the property of being God)	$P(E)$	E is a positive property

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