No new argument against the existence requirement

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Takashi Yagisawa (2005) considers two old arguments against the existence requirement:

(E) For every x, for every possible world w, Fx at w only if x exists at w.

Yagisawa comments that 'Despite their considerable appeal, these arguments are not unassailable' (2005: 39). This is a serious understatement. Both arguments are significantly less appealing than Yagisawa suggests. In particular, the second argument, first given by Kaplan (1989: 498), simply assumes that existence is contingent (§1). Yagisawa's 'new' argument shares this weakness. It also faces a dilemma. Yagisawa must either treat 'at @' as a sentential operator occupying the same grammatical position as '~' or as supplying an extra argument place. In the former case, Yagisawa's argument faces precisely the problems he concedes that Kaplan's argument does (§2). In the latter case, though the argument does not face these problems, it renders the sense in which things exist contingently no threat to (E) properly understood (§3).

1. We consider first the Kaplanian argument against (E). By replacing '*F*' with 'does not exist' in (E), we obtain the 'obviously false':

(KE) For every x, for every possible world w, x does not exist at w only if x exists at w.

Analysis 66.1, January 2006, pp. 39–44.

Yagisawa acknowledges that this argument 'suffers from the controversial nature of non-existence: either "does not exist" is not a predicate hence not a legitimate substituent for '*F*', or negative existential statements are too ill-understood to provide a secure basis for a strong argument' (2005: 39–40). There is a third problem with the argument: (KE) is not obviously false. (KE) has false instances only where the antecedent of the conditional is true and the conclusion false. It will only have such instances if things exist contingently. Hence, a third way of rejecting Kaplan's argument is to claim that everything exists necessarily. (See Williamson 1999, 2002, and below.)

2. Yagisawa's 'new' argument against the existence requirement claims to avoid the difficulties associated with Kaplan's argument. It proceeds as follows: the Principle (E′) is alleged to be an instance of (E):

(E′) For every possible world *w*, Gore lost at @ at *w* only if Gore exists at *w*.

Then, by assuming that iterated modal indexing is redundant, Yagisawa derives the principle (RE) from (E′).

(RE) For every possible world *w*, Gore lost at @ only if Gore exists at *w*.

According to Yagisawa, (RE) 'is false. It is easy to see why. There is some possible world *w* at which Gore does not exist' (2005: 41). If this is so, and we accept the redundancy of iterated modal indexing, then (E) must be abandoned.

The new argument again assumes contingent existence, this time quite explicitly. If Gore exists necessarily, as some defenders of (E) would have us believe, then (RE) is quite acceptable. Perhaps Yagisawa regards Gore's contingent existence as unquestionably obvious. We dispute this claim in §3.

However, even if Yagisawa is right to reject necessary existence, his 'new' argument faces a dilemma. The dilemma arises because Yagisawa pays insufficient attention to the grammar of 'at @' and fails to make it clear whether 'at @' is to be treated as a sentential operator occupying the same grammatical position as '~', for example, or as supplying an extra argument place. In this section we assume 'at @' is to be treated as a sentential operator which we write as 'at-@'. In §3, we consider treating it as supplying an extra argument place.

If 'at @' is regarded as a sentential operator then Yagisawa's argument can be resisted exactly as he suggests resisting Kaplan's argument.[1] For consider (E) under this disambiguation of 'at *w*/@':

[1] Note also that the 'new' argument requires the truth of 'There is a possible world *w* at which Gore does not exist'. However, this involves a negative existential and Yagisawa's first point against Kaplan's argument was that negative existentials are too ill-understood to form the basis of a strong argument.

(EO) For every x, for every possible world w, at-w(Fx) only if at-w(x exists).

Kaplan's argument proceeds by claiming that that (KEO) is a legitimate instance of (EO):

(KEO) For every x, for every possible world w, at-w(~(x exists)) only if at-w(x exists).

But (KEO) simply isn't an instance of (EO), for '~(x exists)' is not an instance of 'Fx'. The latter is a predication and the former is a predication within the scope of a sentential operator. Thus, the argument succeeds only if the abstraction principle holds for negation contexts within the scope of 'at-w', since the abstraction principle will guarantee the equivalence of

$(\lambda y)(\sim(\text{exists}(y)))\{x\}$

and

$\sim(\text{exists}(x))$.

Kaplan's argument can only be rejected by denying the validity of this move. When Yagisawa concedes that Kaplan's argument is assailable because arguably ' "does not exist" is ... not a legitimate substituent for "*F*" ' and that a new argument is needed in order to reject the existence requirement, he is effectively conceding that this abstraction principle may indeed fail. However, consider Yagisawa's new argument, which proceeds by claiming that (EO′) is a legitimate instance of (EO):

(EO′) For every x, for every possible world w, at-w(at-@(x lost)) only if at-w(x exists).

Having argued for the redundancy of iterated modal indexing, Yagisawa infers the following allegedly false instance of (EO′):

(REO) For every possible world w, at-@(Gore lost) only if at-w(Gore exists).

But (EO′) simply isn't an instance of (EO), for 'at-@(x lost)' is not an instance of 'Fx'. The latter is a predication and the former is a predication within the scope of a sentential operator. Thus, the argument succeeds only if the abstraction principle holds for 'at-@' contexts within the scope of 'at-w', since the abstraction principle will guarantee the equivalence of

at-@(lost(x))

and

$(\lambda y)(\text{at-@}(\text{lost}(y)))\{x\}$.

The formal parallel should be clear: if Kaplan's use of predicate abstraction in a modal context on ~(x exists) is problematic, then so is Yagisawa's use of it on at-@(y lost). Yagisawa's detour through the redundancy of iterated modal indexing, though interesting, is redundant: his 'new' argument inherits all the weaknesses (and none of the simplicity) of Kaplan's.

3. The problem we have raised concerning predicate abstraction does not arise if Yagisawa treats 'at @' as supplying an extra argument place. However, if he treats 'at @' in this manner, then the sense in which things exist contingently poses no threat to the existence requirement properly understood. On this disambiguation of 'at @/w', (E) can be re-written as:

(EA) For every x, for every possible world w, $F(x, w)$ only if exists(x, w).

Assuming the redundancy of iterated modal indexing, we can infer the following instance:

(REA) For every possible world w, lost(Gore, @) only if exists(Gore, w).

To complete his argument by showing (REA) to be false, Yagisawa effectively appeals to the premiss that Gore exists contingently; that is, he requires the truth of the following two claims:

(1) ~ exists(Gore, w)
(2) exists(Gore, @).

Of course, we do not dispute the claim that in some sense things exist contingently. However, there remains a question as to how this should be understood. For what is meant by 'exists(x, w)' for variable, w? What does it mean to exist at a possible world?

Since, intuitively, everything exists, a natural way to understand existence is in terms of quantification:

$$\text{exists}(x, w) \equiv \exists y(x = y)$$

In effect, this tells us that to exist at a world is simply to be in the domain of quantification. Unfortunately, Yagisawa cannot accept this equivalence, for it makes (1) and (2) equivalent to the contradictory pair:

(3) $\sim\exists y(\text{Gore} = y)$
(4) $\exists y(\text{Gore} = y)$.

Thus, in so far as existence is to be understood in terms of quantification, Yagisawa cannot interpret the quantifiers in (3) and (4) as having the same range. The quantifier in (3) must be restricted so as not to include all the objects in the range of the quantifier in (4). A natural way to make this clear is to restrict the quantifiers to the domain of the world in question, thus:

(5) $\text{exists}(x, w) \equiv \exists y \in \text{Domain}_w\ x = y.$

And we can re-write (3) and (4) as follows:

(6) $\sim\exists y \in \text{Domain}_w\ (\text{Gore} = y)$
(7) $\exists y \in \text{Domain}_@\ (\text{Gore} = y).$

Each possible world has an associated domain of objects over which the quantifiers range. However, it seems perfectly intelligible to quantify without this restriction; that is, to quantify over (at least) the union of these domains. Furthermore, restricted quantifiers are well-explained by the restriction of an unrestricted quantifier by a predicate. (See Williamson 2004, §2.) Let '$\exists^u$' formulate the unrestricted quantifier, and let '$\text{Exists}_w(y)$' formulate '$y \in \text{Domain}_w$'. (1) and (2) are then equivalent to the pair:

(8) $\sim\exists^u y(\text{Exists}_w(y)\ \&\ \text{Gore} = y)$
(9) $\exists^u y(\text{Exists}_@(y)\ \&\ \text{Gore} = y).$

Since the unrestricted quantifier has the same range with respect to every possible world, we can infer from (8) and (9) that:

(10) $\exists^u x((x = \text{Gore})\ \&\ \sim \text{Exists}_w(x)).$

Thus, the sense in which Gore exists contingently is not that he is contingently in the domain of quantification, but that the existence predicate is true of him at some worlds and not at others. 'Exists', on this understanding, is not true of *everything*; its extension varies from world to world. The implications of this for the existence requirement are as follows.

The truth of (1) and (2) – which express the thought that Gore exists contingently – is not such as to falsify (E) when it is understood as saying that whatever has properties is in the domain of quantification:

(E^u) For every x, for every possible world w, $F(x, w)$ only if $\exists^u y(x = y)$.[2]

For, if the domain of quantification is unrestricted, it is the same with respect to every possible world and, therefore, the fact that things exist

[2] Yagisawa also considers an argument deriving from the temporal analogue of (E):

(T) For every x, for every time t, Fx at t only if x exists at t.

Since Socrates is now widely admired but does not now exist, (T) is said to be false. However, (T) is subject to the same dilemma with respect to what is meant by 'x exists at t'. Formulated in terms of the '$\exists^u$' quantifiers, the principle will not be subject to this objection.

contingently is no threat to (E) when it is formulated in the manner suggested above. Perhaps Yagisawa will find something unintelligible about this formulation and the '$\exists^u$' quantifiers that it depends on. But a reader who found them intelligible will naturally place the burden of proof on the opponents of the existence requirement.[3]

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