Why be so negative?

On contingentism, Stalnaker's theory of propositions, and free logic.

(Re)thinking propositions : themes from Robert Stalnaker (SND, ENS)

Louis Rouillé

FNRS / ULiège

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Plan

Roubaud's possible worlds

- In "Hortense's trilogy", Jacques Roubaud[1] imagines a country called Poldavia which is in fact made of 6 overlapping com-possible worlds:
  - a theoretical possibility that David Lewis discusses and rejects (Lewis 1986: §4.2 "Against overlap");
  - needless to say that strange things happen in Poldavia: characters live double lives, and parallel plots unfold in a very unusual fashion...
- The country Poldavia was first introduced in 1929 as an french anti-republican hoax by a royalist activist from Action Française.[2]
  - And the hoax was perpetuated by many subsequent people (esp. by ENS students):
  - e.g. Nicolas Bourbaki is said to have been an "ex-professor at the royal university of Poldavia".

[1] The novels are: *Our beautiful heroin* 1985, *Hortense is abducted* 1987, *Hortense in exile* 1990 (Seuil). He has also written two collections of poems about possible world semantics: 1986 *Some Thing Black* (during the period of mourning his wife) and 1991 *The Plurality of Worlds of Lewis*.

[2] See: `https://fr.wikipedia.org/wiki/Pold%C3%A9vie`

A contingentist joke

- In the first novel of the trilogy (*Our Beautiful Heroin*, p. 226), Roubaud has a contingentist joke!
- *Context*:
  - Hortense (the heroin) is a student in philosophy. Meanwhile, she has a love affair with a handsome young man called "Morgan", about whom she does not know much;
    - as a matter of fact, she does not know he is one of the Princes of Poldavia.
  - At some point, she rationalises about her lover's morality, using her professor's theory of "ought claims", which is a wild theory couched within a possible world semantics framework.
- Then Roubaud writes:

> *[It appeared to Hortense that] he ought, morally and necessarily, act thus and so, in each possible world (including the worlds where he would not have been Poldavian, but maybe Hortense could not continue the line of reasoning thus far, since she was unaware of his origin; maybe he was necessarily poldavian, that is poldavian in every possible worlds, including those where there is no Poldavia.)*

More serious intuition

- Stalnaker (2023)'s example: "being the daughter of Saul Kripke",
  - Under the assumption of the necessity of origin
    - (i.e. no one in the real world could have been SK's daughter, since no one is)
  - such an individual only exists in a counterfactual scenario where SK also exists.
    - i.e. in a counterfactual scenario where *SK does not exist*,
    - one lacks the ressources for Saul Kripke's possible daughter.
- *Contingentism* is the name of this observation:
  - 1st-order considerations about the contingent existence of individuals...
  - ... carry over to considerations about the contingent availability of predicates;
  - and, *a fortiori*, propositions.

Aim of the talk

1. Explain the origin and scope of the contingentist program;
2. so as to locate Stalnaker (2023)'s metaphysical contribution to this program,
    - esp. in light of Williamson (1996, 2006, 2013)'s repeated criticisms of Stalnaker's strategy.
3. Understand the bare bones of Stalnaker (2003, 2023: §4)'s formal system;
4. so as to discuss and motivate an add-on to the system based on Antonelli (2000)'s positive free logic
    - with some reflections about the philosophical interest of free logic.

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The starting point: extending propositional logic

- *Quantification theory* (QT) and *modal logic* (ML) can be seen as two ways of generalising propositional logic (PL):
  - by considering quantification in the subject position, (QT) relativises the notion of truth to an *assignment function*[3];
  - by considering the context, (ML) relativises the notion of truth to a *possible world*.
- These two generalisations share a lot of structural features, in particular:
  - quantification theory requires that there is a *domain of individuals* to interpret the 1st-order quantifiers ($\forall$ and $\exists$);
  - modal logic requires that there is a *set of worlds* to interpret the modal operators ($\Box$ and $\Diamond$).
  - The "universal" flavour of $\forall$ and $\Box$ is conspicuous in their interaction with logical operators, esp.:
    - Distribution axiom: $\forall x(\phi \rightarrow \psi) \rightarrow (\forall x\phi \rightarrow \forall x\psi)$
    - Axiom K: $\Box(\phi \rightarrow \psi) \rightarrow (\Box\phi \rightarrow \Box\psi)$
- **Pb**: how do we do *both* extensions to get QML?

[3] Cf. Tarski (1956)'s move from truth to satisfaction.

The simplest quantified modal logic (SQML)

- SQML[4] consists in handling the two types of quantification separately.
  1. Take your favourite ML:
     - A set of desirable axioms corresponding to a set of Kripke frames $< W, R >$.
  2. And a 1st order structure:
     - The axioms for QT (and identity) and the usual extensional structures $< D, v >$.
  3. Group the 2 logics together:
     - You have a set of axioms, and models are quadruple $< W, R, D, v_w >$.
- But this simple additive strategy generates controversies because:
  - some theorems of (SQML) have controversial interpretations:
    - i.e. the “Barcan Formulae” (CBF, BF) and the “necessity of existence” (NNE);
  - the interpretations are controversial, because they reveal one’s metaphysical views about existence and identity.

[4] See (Linsky and Zalta 1994) and Hughes & Cresswell (Hughes and Cresswell 1996: §13-4)’s “Lower Predicate Calculus” for the technical story here rehearsed, and different takes on the underlying metaphysical commitments.

The less simple QML

- The “less simple” combining strategy consists in *plunging* QT into ML (vs. putting them side by side):
  - each *world* should thus be thought of as a *1st-order model* of its own (with a *local* domain of individual);
    - Semantically: take a family of domains which depend on worlds: $< W, R, D_w, v_w >$
- This strategy is in fact probably *more* intuitive than the 1st strategy,
  - but there are indeed some “complications” about the interaction of modality and quantification,
  - i.e. some theoretical choices which reflect one’s metaphysical interests.
- Let us then look at the metaphysically controversial theorems.

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SQML: the axiomatic system

- Let us take S5:
  - (K) $\vdash \Box(\phi \to \psi) \to (\Box\phi \to \Box\psi)$
  - (T) $\vdash \Box\phi \to \phi$
  - (4) $\vdash \Box\phi \to \Box\Box\phi$
  - (B) $\vdash \phi \to \Box\Diamond\phi$
  - Necessitation: if $\vdash \phi$, then $\vdash \Box\phi$
  - Modus Ponens: if $\vdash \phi$ and $\vdash \phi \to \psi$, then $\vdash \psi$
  - Tautologies: if ϕ is a propositional tautology, then $\vdash \phi$
- and standard quantification theory:
  - (UI) $\vdash \forall x\phi \to \phi[y/x]$
  - (Dist.) $\vdash \forall x(\phi \to \psi) \to (\phi \to \forall x\psi)$ (with x not free in ϕ)
  - Generalisation: if $\vdash \phi$, then $\vdash \forall x\phi$
- and standard identity theory:
  - (Refl.) $\vdash x = x$
  - (Subst.) $\vdash x = y \to (\phi[x/z] \to \phi[y/z])$

SQML: CBF

- (CBF): $\Box\forall x\phi \rightarrow \forall x\Box\phi$ has a simple derivation in SQML:
  1. $\vdash \forall x\phi x \rightarrow \phi y$ (UI)
  2. $\vdash \Box\forall x\phi x \rightarrow \Box\phi y$ (R1)[5]
  3. $\vdash \forall y(\Box\forall x\phi \rightarrow \Box\phi y)$ (Generalisation)
  4. $\vdash \Box\forall x\phi x \rightarrow \forall y\Box\phi y$ (Dist.)
- **Semantically**: (CBF) is valid in all frames where, if wRw', then $D_w \subseteq D_{w'}$
  - *Intuitively*: "nothing is lost".

[5] R1: if $\vdash \phi \rightarrow \psi$, then $\vdash \Box\phi \rightarrow \Box\psi$; it is easily obtained by necessitation and MP.

SQML: BF

- Deriving (BF): $\forall x \Box \phi \rightarrow \Box \forall x \phi$ takes a little more ressources.
  - First let's derive (R2): if $\vdash \Diamond \phi \rightarrow \psi$, then $\vdash \phi \rightarrow \Box \phi$
    1. $\vdash \Diamond \phi \rightarrow \psi$
    2. $\vdash \Box \Diamond \phi \rightarrow \Box \psi$ (R1)
    3. $\vdash \phi \rightarrow \Box \Diamond \phi$ (B)
    4. $\vdash \phi \rightarrow \Box \psi$ (3+2)
  - And (L1): $\vdash \Box(\phi \rightarrow \psi) \rightarrow (\Diamond \phi \rightarrow \Diamond \psi)$:
    1. $\vdash \Box(p \vee q) \rightarrow (\Box p \vee \Diamond q)$[6]
    2. $\vdash \Box(\neg \phi \vee \psi) \rightarrow (\Box \neg \phi \vee \Diamond \psi)$
    3. $\vdash \Box(\phi \rightarrow \psi) \rightarrow (\Diamond \phi \rightarrow \Diamond \psi)$
  - Here is the proof of (BF):
    1. $\vdash \forall x \Box \phi x \rightarrow \Box \phi x$ (UI)
    2. $\vdash \Box(\forall x \Box \phi x \rightarrow \Box \phi x)$ (Nec.)
    3. $\vdash \Diamond \forall x \Box \phi x \rightarrow \Diamond \Box \phi x$ (L1+2)
    4. $\vdash \Diamond \forall x \Box \phi x \rightarrow \phi x$ (B+3)[7]
    5. $\vdash \forall x(\Diamond \forall x \Box \phi x \rightarrow \phi x)$ (Gen.)
    6. $\vdash \Diamond \forall x \Box \phi x \rightarrow \forall x \phi x$ (Dist.)
    7. $\vdash \forall x \Box \phi x \rightarrow \Box \forall x \phi x$ (R2)
- **Semantically:** (BF) is valid on all frames where, if wRw', then $D_{w'} \subseteq D_w$
  - *intuitively*: "nothing is gained".

[6] Take: $\neg q \rightarrow p (\equiv p \vee q)$ and apply (K).
[7] (B): $\Diamond \Box \phi \rightarrow \phi$

SQML: NNE

- Deriving (NNE): $\Box\forall x\Box\exists y(x = y)$ is easy:
  1. $\vdash x = x$ (Refl.)
  2. $\vdash \exists y(x = y)$ (EG)[8]
  3. $\vdash \Box\exists y(x = y)$ (Nec.)
  4. $\vdash \forall x\Box\exists y(x = y)$ (Gen.)
  5. $\vdash \Box\forall x\Box\exists y(x = y)$ (Nec.)
- **Semantically**: the quantifiers range over the same domain of individual accross worlds.
  - *intuitively*: all individuals exist in all worlds;
  - i.e. what exists is independently of where we stand in the modal space.
- (NNE) falls out of the motto: "nothing is lost (CBF), nothing is gained (BF): everything is transformed".
  - Not only does it sound scientifically respectable,
  - but it also motivates a combinatorial view of modality were possible worlds are variations on a fixed set of individual substances.

[8] (EG) is the dual of (UI).

Kripke's "generality interpretation"

- In order to block all the problematic proofs of (CBF), (BF), and (NNE), Kripke (1963) proposed to close the open formulas in the axiom system, with a universal quantifier. So we have:
  - (UI$^{\forall}$) $\vdash \forall y(\forall x\phi x \rightarrow \phi y)$
  - (Subst.$^{\forall}$) $\vdash \forall x\forall y(x = y \rightarrow \phi[x/z] \rightarrow \phi[y/z])$
  - (Refl.$^{\forall}$) $\vdash \forall x(x = x)$
- It does block the proofs, but it has be thought unsatisfactory for several reasons:
  - Impossible to add constants the the language, on pain of allowing a derivation of constant versions of (CBF), (BF), and (NNE);
    - the solution sacrifices *de re* modalities, which was the aim of all this.
  - *Metaphysically*: it shortcuts the discussion of ontological commitment to possible individuals,
    - and also the conceptual link between contingency and existence, which is what was the subjet all along.

Plan

The metaphysical perspective

- **Pb**: how to get a system for *really* variable domains?
  - *NB*: *really* here is used to discard metaphysical re-interpretation of SQML, which have a constant domain logically speaking and account for *variation* using metaphysical concepts, as, e.g.:
    - the introduction of (un)instantiated individual essences (Plantinga 1974);
    - or use of abstract (vs. concrete) objects to explain non-existence (Zalta 1983), (Williamson 2013).
- Prior (1957) provides the seminal idea for a solution:
  - There are two kinds of propositions: the *general* ones (about no specific individual) and the *singular* ones (about an individual x).
  - So, when x does not exist, there can be no singular propositions about x.
    - In such situation, the singular proposition is not expressible; it is not available.
  - (Contingentism) Given that the existence of an individual depends on the location in the modal space...
    - ... it follows that which (singular) propositions are expressible depends on where we are in the modal space.
  - *Intuitively*: to introduce an individual brings with it a host of new propositions.

Complications

- The problem of *nested* modalities:
  - Given that no one *in reality* is possibly Saul Kripke's daughter, the only propositions about her are *general*:
    - we think about her descriptively by contemplating a counterfactual scenario.
  - But how can we talk and think about her possible lives?
  - In order to do this, we need to flesh out one particular counterfactual scenario, where, say:
    - (i) Merab (as let's call her)[9] is a computer scientist,
    - who (ii) could have been a biologist (according to another counterfactual scenario).
    - $\Diamond\exists x(xDs \wedge \Diamond Bx)$
  - So we need to single out Merab, before we can express a singular proposition about her possible lives.
- So we need to keep track of what is statable where:
  - i.e. keep track of which name (for nonexistent individuals) has been introduced where.
  - *Intuitively*: there is an underlying topology of the modal space to take into account for the contingentist.

[9] Merab, from the *1st book of Samuel*, is the first daughter of Saul, the first King of Israel.

Plan

Roadmap

- *Recall*: Stalnaker (2023)'s general strategy is to apply tools designed for the 1st order (variable domain semantics for MQL) to propositions, so as to model a *variable domain of propositions*.
- The axiomatic system should then work out Kripke's strategy to block the derivation of (BF), (CBF), and (NNE),
  - but also allow the use of constants or names for non (actually) existent individuals;
  - i.e. elucidate the topology of modal space.
- The technical ingredients are:
  - λ abstraction interpreted as a variable binding operator;
  - *negative* free logic for handling empty terms;
  - the *qualified* converse Barcan formula to keep track of term introduction.
- I will then show how tweak the free logic, and look at some consequences.

Plan

Abstraction

> *[There are] two conceptually distinct operations that are performed by variable-binding quantifiers: first, the implicit formation of complex predicates from complex sentences by introducing blanks – free variables – in the sentences; second, generalization: the formation of genera claims from predicates – the claim that everything in the domain, or at least one thing in the domain, satisfy the predicate that is implicitly represented by the open sentence. In our language, the abstraction operator makes the first of these operations explicit, turning an open sentence into an expression that has the syntactic role as well as the semantics function of a predicate. Then the quantifier has only the job of expressing generality.*[10] *(Stalnaker 2003: 146)*

- Abstraction: $\vdash \forall x(\lambda y[\phi](x) \leftrightarrow \phi[x/y])$
  - The binding operation means that one *has to* pick up a member of the domain (for y),
    - *and not* an empty term that doesn't refer to anything in the domain.

[10] *It is especially useful to distinguish between binding and quantifying for disambiguating between de dicto and de re modalities (cf. (Thomason and Stalnaker 1968) on "The US president is necessarily an US citizen"); moreover, it is useful to move up to the 2nd order (cf. Stalnaker (Stalnaker 2023: 103) vs. Jacinto (2017)'s "strongly Millian modal logic").*

- **Rk**: whenever a term is *rigid*, abstraction and substitution coincide.
  - If a term is not rigid, then one can substitute it, but not bind it.
    - t is *rigid* (in a world): $(Et \wedge \Box(Et \rightarrow \lambda x[\Box((Ex \vee Ey) \rightarrow x = t)](t)))$
    - (T12): $\lambda x[\Box((Ex \vee Ey) \rightarrow x = t)](t) \rightarrow (\lambda y[\phi](t) \leftrightarrow \phi[t/x])$
  - Abstraction thus plays a crucial role: we are going to introduce a witness under a rigidity condition.[11]
- **Semantically**: the assignment function s is *partial*, i.e. some terms are assigned *no individual* of the domain;
  - $\lambda x[\phi]$ denotes the part of the domain that satisfy ϕ (given an assignment function):
  - so $v_s(\lambda x[\phi])$ can be seen as the extension of ϕ, restricting s to where it is defined.

[11] *Recall*: this is required to evaluate nested modalities.

Free logic

- Free logic is already introduced with the partiality of s.
- FL requires:
  1. UI should be restricted to existents only:[12]
     - (T5) $\vdash \forall x Fx \to (\exists x(x = t) \to Ft)$
     - *Intuitively*, FL can be seen as any tweaking of QT that blocks (CBF) and (BF) (*a fortiori* (NNE)), when extended to a modal context.[13]
  2. an explicit (extensional) way of handling empty terms (which are not in D).
     - Existence: $\vdash Ft \to \exists x(x = t)$
     - *Intuitively*: truely predicating presupposes existence.

[12] This is already the case in $\mathrm{UI}^{\forall}$. Stalnaker retrieves Kripke's strategy against SQML, but distinguishes *binding* (λ) from *quantifying* ($\forall$).

[13] For the "naturalness" of the interpretation of FL within possible world semantics, see (Bencivenga 2006) and (Pavlović and Gratzl 2020).

- **Semantically**: $v_s(Ft) = 1$ iff $s(t) \in v(F)$, *and 0 otherwise*.[14]
  - *Otherwise* here covers two cases:
    1. either $s(t) = d$ with $d \in D \setminus v_s(F)$;
    2. or $s(t)$ is undefined.
- **Rk**: this "negative" choice consists in taking "iff" seriously in the classical semantic clause for atomic statements.
  - It has a high philosophical pedigree:
    - it is argued for by Jean Buridan (*Sophismata* §1.6.5.),
    - serves as a basis of Russell's treatment of definite descriptions in *Principia mathematica*,
    - was the first fully formalised FL by Schock (1968),
    - was argued for in the philosophy of language by Burge (1974).
  - Stalnaker (2023) adds that, in spirit, it is in line with Quine's treatment of singular terms.

[14] With, as usual: $v_s(\forall x F x) = 1$ iff $v_s(F) = D$.

Plan

QCBF

- The modal propositional logic is S5, with the usual equivalent Kripke frames.
- Contrary to (BF) ("nothing is gained") and (CBF) ("nothing is lost"), which are semantically unmotivated,

> *the following qualified version of CBF does seems to be validated without any assumptions about the relationships between the domains of the different possible worlds:*
> *(QCBF):* $\vdash \Box\forall x\phi x \rightarrow \forall x\Box(Ex \rightarrow \phi x)$
> *If in w it is necessary that everything satisfies* ϕ*, then anything in w must satisfy* ϕ *in every accessible possible world in which that individual exist.*[15] *(Stalnaker 2003: 151)*

[15] *Note that the equivalent existential version:* $\exists x\Diamond(Ex \wedge \phi x) \rightarrow \Diamond\exists x\phi x$ *is intuitively very hard to resist!*

- Well, there is *one* assumption about the relationship between domains: they must *overlap* (if there are true *de re* modalities).
  - Indeed, a counter model for (QCBF) comes from Lewis (1986)'s *disjoint* domain semantics, with = handled by his "counterpart theory".
  - So (QCBF) can be seen as a way of forcing *varying* domain semantics (vs. constant, vs. disjoint);[16]
- (CQBF) thus *intuitively* says "nothing is forgotten":
  - i.e. even if some new individuals are gained or lost in moving around in the logical space, we remember where they come from.
  - Additionally (QCBF) nicely combines with the *rigidity condition*:
    - things of the domain can disapear, but once a variable gets assigned one individual (somewhere), it cannot pick out a different individual (elsewere);
    - i.e. one is not allowed to over-write bound variables.

[16] *Metaphysically*: Lewis (1986) is a *concretist* for whom existence is world-bound; Stalnaker (2023) is an *abstractionist* for whom existence is not world-bound; Williamson (2013) is a *necessitarist* for whom existence is world-independent.

Plan

Stalnaker's completeness proof

- Stalnaker (2023: 119-126)'s completeness proof is a standard Henkin proof:
  - Start with a consistent set of sentences Γ_0 and construct by enumeration a maximally consistent set Γ_n which it then shown to correpond to the intended model.
  - **Mth**: *saturate* the sets by adding witnesses for *existential* sentences;
    - i.e. we start with a base language $\mathcal{L}$ and augment the language with a set R of new constants to get $\mathcal{L}^+$.
- 2 complications though (given it is not SQML):
  1. some new constants come with a *rigidity condition* (expressed in the object language);
     - So we can then track *where* in the construction the constant was added:
     - i.e. the first Γ_k which contains the statement expressing the rigidity constraint for the constant.
  2. All the worlds are constructed step by step together;
     - by adding all the modal sentences true at a world *and* all the sentences in other worlds to adjust;
     - so it's a *double induction* on the number of worlds and on the complexity of formulae of the (augmented) language.

- The important part for us is that during the construction, we will select a subset of R, call it R^*, which corresponds to all the *rigidified* constants of the language.
  - these are all the constants that appear *in some domain or other*, when constructing the models for the completeness proof.
  - this is how the family of domains D_w are constructed;
  - the trick is that "The members of R^* are both the names and the objects they name." (Stalnaker 2023: 124).
- **RK**: Antonelli (2000) does the same construction for a completeness proof in a single-domain, bivalent, extensional *positive* free semantics, so there is nothing resting on *negative* FL in this proof.[17]

[17] See also (Pavlović and Gratzl 2020) for a uniform treatment of positive and negative FL.

Plan

Proto-semantics

- Antonelli (2000)'s idea is when a term is empty:

  > *truth is parametrized to an index that does not appear explicitly in parlance involving terms with no existential import. But, in contrast to the modal case, the parameter rather than being extralinguistic is itself part of the language, so that one can speak, in analogy to modal logic, of truth at a term t. (p. 279)*

- Formally:
  - The assignment function is partial;
  - first run a *proto-interpreation* which gives a *signed extension* for all predicates: $\pi(P^n) = (S, +)$ or $(S, -)$, where $S \subseteq D^n$ and $+/-$ are markers;
  - there are as many π as there are ts;[18]
  - $P(t)$ is true (relative to an assignment function, relative to a term) iff:
    1. if $s(t)$ is defined, $\pi_t(P) = (S, \pm)$ and $s(t) \in S$;
    2. if $s(t)$ is undefined, $\pi_t(P) = (S, +)$.

[18] And πs respect substitution of identicals.

An interpretation of proto-semantics

- Think of π as dealing with the existence presuppositions of predicates:
  - $(S, -)$ means "false of all empty terms", $(S, +)$ means "true for some empty terms".
  - there is one π for each term, because if t is empty it should say *of which predicate* it is true:
    - i.e. when a term crashes, there is a rescue procedure.
  - *Intuitively*: an empty term t is an information box, containing a list of predicates.
    - Connecting with Stalnaker's R^* (where names are both names and objects), t crucially says *where* it was introduced (and rigidified).
- In fact, I think it is useful to track both existence and non-existence commitments (Rouillé 2024)
  - because some (complex) predicates are ways of "characterising non-existence" (Kroon 1996).

Hoaxes, again

- In 1995, Jean-Baptiste Botul was introduced as 19th century Kant scholar credited with a "masterpiece" entitled *The Sexual Life of Immanuel Kant*, which was written on the occasion.
- In 2010, in a book entitled *On War in Philosophy*, the French mediatic philosopher Bernard-Henri Levy quotes extensively and seriously from this book.[19]
- Suppose one says to him:

  (1) Jean-Baptiste Botul is a hoax.

  in order to justify the claim that:

  (2) Jean-Baptiste Botul does not exist.
- In order to track such inference patterns (and relevant truth conditions), one needs PL^+: proto-semantics is useful.

[19] For more details on this episode, see the Los Angeles Times paper: You Kant make this up: Bernard-Henri Levy falls for hoax.

Some logical consequences of positive free logic

- One should thus restrict (Existence): $\vdash F(t) \rightarrow \exists x(x = t)$ to only those Fs which presuppose existence.
  - Now, Stalnaker (2023) argues that the language is already "regimented" in Quine's sense,
  - but it begs the question in a positive free logic, because the regimentation should follow some logic (I discuss this in my (Rouillé 2024))
- This add-on *does not threaten* Stalnaker (2023)'s completeness proof.
  - However, some nice theorems need (Existence): e.g. the commutativity of identity (T4); and the well-behaviour of abstraction under negation (T9).
  - This is unsurprising, but remember that we can always restrict (Existence) for a subset of the predicates of the language.

Some metaphysical consequences of positive free logic

- I think the construction here described is importantly *dynamic* and *constructivist*.
- As Bengivenga (2006: 301-2) puts it, the difficulty consists in not treating "the objects by courtesy as fully-fledged objects."

  > *Intentional objects are not more a kind of objects than alleged objects are; they are only a manner of speaking. The only objects are the existing ones, the objects simpliciter; who thinks otherwise is going to fall into the trap of assigning objective status to God, the soul, the world, and other fictional entities. The (conceptual) 'construction' of objects simpliciter takes time, and during this time intentional objects play a role; but by the end they are supposed to disappear. [...]*
  >
  > *How can we provide a rigorous articulation of the purely instrumental role of the mental experiment – which is supposed to be canceled out at the end and in the meantime is not supposed to challenge what is the case for objects simpliciter, the only objects there really are?*

- His answer is the "Principle of the Prevalence of Reality: real information is always to prevail over fictional 'data.'"

- And this somewhat clashes with Stalnaker's few remarks on the availability of constructed predicates (and the "nothing is forgotten" flavour of his theory):

> *Even though the property of being a son of HC would not exist if th[e] counterfactual possible situation [HC does not exist] were realized, the predicate 'is a son of HC' is admissible in the actual world, and [...] it seems to be applicable in the counterfactual situation. (Stalnaker 2023: 150)*

- Be it as it may. I think looking at the *dynamic process* is more interesting than the result only:
    - the result is an all-encompassing domain of (possible) objects;
    - and we need an explicit "de-realisation" mechanism to go back to reality and look at empty terms for what they are:
    - not standing for objects, but (real) information boxes in which we synthesise the mental experiments we share.

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