

**A. Varzi, Naming the stages**  
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The two purposes of Varzi's article:

- [1] Kripke's Rigidity Thesis requires us to accept a substantive theory of persistence. Therefore the Stage Theory offends *ipso facto* against it. However, it is still possible to supply an alternative to it, which - in the same time - keeps its advantages, and is consistent with the Stage Theory.  
 [2] Give a general defense of the Stage Theory over rival theories.

## I. Rigidity Thesis & Rigidity Thesis

### 1. Rigidity Thesis stated

**Rigidity Thesis (RT)** a proper name [and a definite description on *de re* reading] is a rigid designator: in a speaker's mouth and at every time  $\forall$  in every world [in which it picks out an entity at all] it picks out the *same* entity (Varzi 2003, 1)

According to Varzi (2003, 20), the purpose of RT was, originally, to mark the distinction between the semantic behaviour of a proper name and that of a definite description on its *de re* reading.

→ More precisely: in different worlds  $\forall$  at different times [a] the referents of a proper name necessarily entertains the R relation (identity); whereas [b] the referents of a definite description on its *de dicto* reading doesn't necessarily entertain it.

As Varzi (2003, 2) remarks, the RT requires us to accept an affirmative theory of identity through time [and world]. The two alternative theories are the *3D Theory* and the *4D Theory*:

**3D Theory** objects have spatial but non temporal parts; they persist through time being entirely present at every time at which they exist; they exist until they keep their essential properties<sup>1</sup>

**4D Theory** objects have both spatial and temporal parts; they persist through time being - from a temporal point of view - partially present at every time at which they exist; they exist until - and it becomes analytical - they extend over time<sup>2</sup>

Conversely, theories that deny identity through time, can't offer a suitable metaphysical background for the RT. E.g. consider the

**Stage Theory** objects are time-bound entities; they don't persist; there is a particular relation - the counterpart relation - which can bound different stages at different times<sup>3</sup>

<sup>1</sup> In Varzi's article are taken into account only those 3D versions which can offer a suitable metaphysical background for the RT. And, in Varzi's opinion, this commits 3D Theory to Essentialism. Therefore other 3D versions - even more elusive and plausible (Chisholm's 3D Theory) - are rejected, if they don't accept Essentialism, or they stand in whatever conflict with the RT.

<sup>2</sup> Here the 4D Theory is considered in Quine's version = 4D Theory  $\wedge$  there is exactly one entity for any matter-filled region of space-time, however disconnected and gerrymandered (Varzi 2003, 12).

<sup>3</sup> According to Varzi (2003, 18) it differs from the 4D Theory [1] semantically, because for the Stage Theory a proper name with a referent doesn't identify a 4D worm; and [2] metaphysically, because the Stage Theory isn't committed to the assumption of temporal extended aggregates of stages.

## 2. Rigidity Thesis 2.0

Varzi's claim is that - endorsing the Stage Theory - even if the RT becomes untenable we can however save its advantages, by formulating an alternative semantic thesis, in which we replace the identity relation with the counterpart relation.

**Quasi-Rigidity Thesis** a proper name [and a definite description on its *de re* reading] is a quasi-rigid designator: in a speaker's mouth, and at every time  $\forall$  in every world [in which it picks out an entity at all], it picks out [a] the first stage-entity  $x$  so-named, and [b] the next  $n$ -counterparts of it (Varzi 2003, 19 - 20)

According to Varzi (2003, 20), this thesis - like RT - can mark the distinction between the semantic behaviour of a proper name and that of a definite description on its *de dicto* reading.

→ More precisely: in different worlds  $\forall$  at different times [a] the referents of a proper name necessarily entertain the Q-R relation (quasi-identity); whereas [b] the referents of a definite description on its *de dicto* reading doesn't necessarily entertain it.

Note that this new thesis has this virtue thanks to the necessity of a counterpart relation between same<sup>4</sup>-named stages.

## II. Defending the Stage Theory

Varzi's purpose is to defend it, working on two battlefronts.

### 1. Demonstrate its skills over rivals

Immediately below six problems which afflict 3D and 4D Theories, but not the Stage Theory.

[1] According to Varzi, the 3D Theory - in order to explain the identity through time - is committed to **Essentialism**, which would be not so explanatory<sup>5</sup>.

→ On the other hand, the Stage Theory has to explain only the counterpart relation [which seems to be a less metaphysically demanding enterprise].

[2] Assuming the 3D Theory, one would be forced to endorse that, during a process of total decomposition or substantial change, there are steps where an object neither maintains its identity, nor loses it<sup>6</sup>. If it's true, 3D Theory is committed to a sort of **metaphysical vagueness**, which is *per se* problematic.

→ On the other hand, in the Stage Theory, the problem of the total decomposition process concerns exclusively the limits of the counterpart relation.

[3] Consider « $x$  at  $t_n$  is  $P$ » (where  $P$  is a temporary intrinsic property). How can a 3D theorist interpret «at  $t_n$ »? Varzi reports two alternatives:

<sup>4</sup> «Same» is here in its token sense.

<sup>5</sup> Consider [a]  $x$  can't survive the loss of  $P$  because  $P$  is essential to  $x$ ; and [b] essential property =<sub>def</sub> a property that an object can't lose. The distinction between essential and accidental properties seems to be not further explicable.

<sup>6</sup> There is obviously another option, according to which the total decomposition process is not a gradual change. Varzi (2003, 8) rejects it as [not only from an epistemic point of view] implausible, especially taking into account inanimate objects.

[a] as an adverbial modifier of the copula; in this case, we're hypothesizing a triadic relation among  $x$ ,  $P$  and  $t_n$ . But this cannot be a good explanation, because - from the 3D point of view - the exemplification's tie between  $P$  and  $x$  seems more strict than a relational one (Lewis 2002, 5);

[b] as an adjectival modifier of  $x^7$ ; but this gives rise to problems with diachronic identity: by Leibniz Law,  $x$ -at- $t_1$  and  $x$ -at- $t_2$  cannot be identical since, being at different times, they would have *ipso facto* different properties.

→ This so-called '**temporary intrinsic properties problem**' doesn't afflict the Stage Theory, because - having already deny diachronic identity - it can accept [b] without unwelcome consequences.

[4] Take the case of Tibbles the cat. At  $t_1$  he's a tail, at  $t_2$  no more. Lets call «Tib» Tibbles' part without the tail.

(1) At  $t_1$  Tibbles  $\neq$  Tib

(2) At  $t_2$  Tibbles = Tib

Given that identity is transitive relation, we need to refuse one of the two, and, in Varzi's [no more in detail justified] opinion (2003, 9), the better candidate to be denied is (2). The conclusion is that a 3D theorist is compelled to allow that spatiotemporal totally overlapping entities, formed by exactly the same matter, can be numerically different (**paradox of material coincidence**).

→ On the other hand, assuming that the counterpart relation doesn't need to be one-to-one (Varzi, 2003, 19), in the Stage Theory the problem disappears: Tib-at- $t_2$  can be the  $t_2$ -counterpart of both Tibbles and Tib-at- $t_1$ .

[5] What are we doing naming an entity, if we are 4D theorists? According to Varzi (2003, 13) we're assigning a proper name to an object whose *present temporal part [and only the present one]* falls under a specific sortal concept<sup>8</sup>. This means that all possible mereological fusions [of recent and past parts falling under whatever sortal] are equally good candidates to be 4D worms. But if the things are really so, they give rise to a problem for the **4D Theory: it is not able to explain why all speakers recognize the same mereological fusion as referent of a proper name**.

→ On the other hand, Varzi (2003, 19) says that, in the Stage Theory, «the counterpart relation itself... [can be] ...meant to reflect precisely the sorts of features that appear to underlie our use of proper names».

[6] Consider the proposition «Some philosopher was a table»: it seems obviously false. But 4D Theory *per se* does not exclude that there is an entity which makes this proposition true, like a 4D worm which is the mereological fusion of Varzi's present temporal part and a table's past temporal parts. This means that the 4D Theory doesn't give us the tools to deny that **there are 4D worms which are violating our common logical intuitions**<sup>9</sup>.

→ On the other hand, in the Stage Theory the problem disappears: there is no reason to think that the present stage of Varzi can be in the counterpart relation with whatever past stage of a table.

<sup>7</sup> This tie, by Bradley's regress, cannot be a relational one.

<sup>8</sup> An available alternative says that naming an entity we assign a proper name to a 4D worm which *in its entirety* falls under a sortal concept. Our article doesn't consider it a good option, because it would commit to a strong *liason* between sortal and entity [this entity will every time fall under this sortal concept], and this offends against the claim that proper names do not impose any constraints on their referents.

<sup>9</sup> A solution can be to assume that to be a philosopher implies not only a philosophizing part, but also be a person [= tie every predicate to a sortal]. But this is problematic (Varzi 2003, 17), because it gives rise to a vicious regress (every continental is a [bad] philosopher, every philosopher is a person, every person ...).

## 2. Backfire against criticisms

Immediately below four possible criticisms against the Stage Theory, with Varzi's response for each one.

[1] The Stage Theory assumes that everything is the result of a constant process of total annihilation and creation *ex nihilo*. This could seem *per se* metaphysically extravagant.

→ The persistence isn't - from a theoretical point of view - less mysterious than a creation *ex nihilo*. However, it is also possible to assume that the counterpart relation is a causal relation: the existence of a stage becomes the cause of the existence of its next counterpart (Varzi 2003, 22).

[2] The Stage Theory may bring counterintuitive consequences with first-person counterfactuals: it sounds strange that when John is thinking about his future life, he is thinking about his future counterparts, and not about himself<sup>10</sup>.

→ This belief is based on a misunderstanding of the counterpart theory. This theory doesn't say that John, in this situation, is not thinking about himself, but only that his thought about 'himself in the future' [if true] is made true by his future counterparts [which give him the needed temporal property to make true the fact that he will be in a certain way] (Varzi 2003, 24).

[3] By endorsing the Stage Theory, the single stages become prior to the persistent entities of the commonsense. This could seem strange, because effectively we cannot individuate the stages without making reference to those persistent entities.

→ No metaphysical conclusion can be drawn from considerations about limits of human epistemical or semantical abilities (Varzi, 2003, 25).

[4] A conclusion of the Stage Theory is that the stage-theoretic vocabulary is analytically prior to the ordinary.

→ Obviously this says us nothing about metaphysics. But, perhaps, also about ordinary language: as we don't need to translate our ordinary language in terms of subatomic particles - even if we think they are physically more basic than their aggregates -, so we don't need to translate it in terms of stages (Varzi 2003, 25).

At the beginning, some features of the Stage Theory [especially the negation of persistence] made it look to be *prima facie* counterintuitive: its costs seemed to be higher than its benefits.

But for Varzi the paper's conclusion is bright: now the equation has changed<sup>11</sup>.

## References

Varzi, A. 2003, "Naming the Stages", *Dialectica*, 77 (3), 387 - 412<sup>12</sup>.

Lewis, D. K. 2002, "Tensing the copula", *Mind* 111, 1 - 13.

<sup>10</sup> This argument is a Perry's adaptation of Kripke's 'Humphrey argument', originally against Counterpart Theory applied on *de re* modality.

<sup>11</sup> Some critical remarks, about Varzi's arguments against 3D and 4D, the characterization of the counterpart relation, Stage-compatible alternatives to the proposed Quasi-Rigidity Thesis, will follow in the oral version.

<sup>12</sup> In the handout I refer to the page numbering adopted in the paper's online version, that can be consulted at: [http://www.columbia.edu/~av72/papers/Dialectica\\_2003.pdf](http://www.columbia.edu/~av72/papers/Dialectica_2003.pdf).