My own truth — relative truth and pathologies of self-reference

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Conventions. I adopt the following conventions

- (Z): 'this one is dangerous'

should read: (Z) names the token of the type sentence 'this one is dangerous' above. Without the single quotes the sentence would have been used rather than just mentioned, so it should have read: this one is dangerous, and (Z) names the token the type sentence above)

- $(Z)_O$ | the lion at such and such location is dangerous.

should read '$(Z)_O$' stands for the sentence use of (Z) on occasion of use O, '|' stands for 'states exactly'. I will neglect the mention of the occasion when it is irrelevant.

Overview. In this summary, I will consider the truth-teller in order to outline my main argument argument of the paper.

It is usually assumed without further ado that

- **Uniformity**: all truth-tellers have the same semantic value (or the same lack thereof). They are not context-sensitive.
- **Absoluteness**: *A fortiori,* truth-tellers are not relative. The truth-value of a given truth-teller use is not relative to the context in chich it is assessed.

In the paper, I show that those two claims are wrong. The Truth-Teller exhibits a radical form of *relativity.* Against *uniformity*, different tokens of the Truth-Teller must have different truth-values and imply different things. Indeed, I show that there is virtually no limit to what truth-tellers can imply. Against *absoluteness*, I also give a stronger argument to the effect that one can change the truth-value of a given token truth-teller *on a given occasion of use* very easily, by changing the context of its assessment.

The case against uniformity The case against uniformity is the main part of the argument. I will keep to it for that summary.

In order to show that various token truth-tellers must have different truth-values I construct two sentences and I show that (i) although they both are truth-tellers (ii) they must nevertheless differ in truth-value. Consider for example (1) and (2), where 'p' and 'r' are arbitrary sentences:

- (1): 'p and not False((1))'
- (2): 'r or not False ((2))'

The first thing to notice is that if we choose 'p' so that it is bivalent — that is, either true or false, not gappy — then (1) will be bivalent too. For if (1) were gappy, it wouldn't be false. Accordingly, 'not False((1))' would be true. But then (1), that is 'p and not False((1))', would have the same truth-value as 'p'. As *ex hypothesis* 'p' is not gappy, (1) would not be gappy neither. So (1) cannot be gappy if 'p' isn't[1]. From now-on we will consider that 'p', and accordingly (1), are both bivalent.

Now it takes little work to see that because of its self-referential character, (1) is indeed a truth-teller: it says of itself that it is true, and nothing but that. For on any occasion O, $\mathrm{Tr}((1)_O) \Leftrightarrow$ (p and not $\mathrm{False}((1))_O$):

1. $\mathrm{Tr}((1)_O) \Rightarrow \mathrm{Tr}((\text{`p and not False ((1))'})_O)$ (for by definition (1): 'p and not False((1))')
2. $\mathrm{Tr}((\text{`p and not False((1))'})_O) \Rightarrow$ (p and not False $((1))_O$) (by one conditional (namely, Tr-release) of the Tr-principle)
3. (p and not $\mathrm{False}((1))_O) \Rightarrow$ not $\mathrm{False}((1)_O)$ (conjunction)
4. not $\mathrm{False}((1)_O) \Rightarrow \mathrm{Tr}((1)_0)$ (as (1) is not gappy)
5. So $\mathrm{Tr}((1)_O) \Leftrightarrow$ (p and $\mathrm{Tr}((1))_O$)

This already seems like a good reason to believe that (1) is, so to speak, redundant: that it *only* says of itself that it is true, and that by saying that, it also says that p. Actually, I think that the mere logical equivalence is not enough for identity of statements

. But we have more than a mere logical equivalence here. For (i) the above reasoning is very simple (ii) and provided that 'p' is chosen appropriately any competent speaker who masters the concepts involved in the understanding of '$\mathrm{Tr}((1)_O)$' should understand those involved in that of '(p and $\mathrm{Tr}((1))_O$)'. Accordingly, no competent thinker could believe that (1) is true while not believing that p and (1) is true. Nor could any such thinker believe that p and (1) is true without believing that (1) is true.

[1] I consider contextualist objections to this line of reasoning in the paper.

- **ISP** (Identity of Statement Principle) On any occasion of use, if what the sentence (s) says is logically equivalent to what the sentence (t) says, and if no competent thinker can believe what the one sentence says without believing what the other sentence says, then (s) and (t) say the same thing[2].

So in virtue of **ISP**, (1) exactly says of itself that it is true:

- (1) | Tr((1))

More generally, we have the following redundancy principle:

- **1st RP** (1st Redundancy Principle) On any occasion of use, if a sentence both says that p and that it is not false, then that sentence just says of itself that it is true.

It might be thought that the claim that a sentence says that it is not false *and that p* and the claim that it *only says that it is true* and nothing but that are in tension. Actually they aren't. If I hear John say that truth is important I can say the same thing, although *indirectly*, by saying that what John just said is true. In the same way, if a sentence both says that p and that it is not false, then that sentence just says of itself that it is true, but by saying that, it *ipso facto* (and indirectly) says that p.

In the exact same way, on any occasion of use, Tr(2) $\Leftrightarrow$ (r or not False ((2))) (for simplicity, we will omit the occasion of use):

1. not False((2)) $\Rightarrow$ (r or not False((2))) (disjunction)

2. (r or not False(2)) $\Rightarrow$ Tr('r or not False((2))') (by one conditional, Tr-Capture, of the Tr-principle)

3. Tr('r or not False((2))') $\Rightarrow$ Tr((2)) (for by definition (2): 'r or not False ((2))')

4. Tr((2)) $\Rightarrow$ not False ((2))

5. So Tr(2) $\Leftrightarrow$ (r or not False((2)))

And just as before, no competent thinker can believe one of the two equivalents without believing the other one, so by **ISP**, (2) just says of itself that it is true.

[2]Notice that the condition of logical equivalence is not redundant with the condition on beliefs. I cannot rationally believe that (I *(de se)* believe that it is raining) without believing that (it is raining and I *(de se)* believe that it is raining), and arguably no one can. The two embedded sentences nonetheless say different things.

- **2nd RP** (2nd Redundancy Principle) On any occasion of use, if a sentence both says that r or that it is not false, then that sentence just says of itself that it is true (it *ipso facto* says that r or that it is not false).

Accordingly, both (1) and (2) name truth-tellers: they name sentences which exactly say of themselves that they are true. But it is all too easy to choose ‘p’ and ‘r’ so that (1) and (2) have different truth-values on any occasion of use. Indeed, if on any occasion of use ‘p’ is false, (1) which says that (p and not False(1)), will also be false. Similarly, if ‘r’ is true on any occasion, (2), which says that (r or not False(2)) will not be false. So provided that ‘p’ and ‘r’ are chosen that way, (1) and (2) will be two truth-tellers with different truth-values. This means that truth-tellers cannot all have the same truth-value.

A case against absoluteness ? One question that should naturally arise at this point is the following: in virtue of what do different truth-tellers have different truth-values ? What should make this question puzzling is that all truth-tellers just say of themselves that they are true, and nothing more. For sure (1) and (2) are spelled differently. But the mere graphical difference cannot be relevant here. Despite their graphical difference, (1) and (2) both say of themselves that they are true and nothing more. So what could explain their semantic difference? One might suggest that it is due to a difference in the occasions of use. More precisely, truth-tellers could be implicitly indexical. Such a contextualist (indexical contextualist) view might seem promising as it has been defended to solve semantic paradoxes of self-reference. But it is not very plausible here. For one thing, one could chose ‘p’ and ‘r’ so that swapping the context of use of (1) and (2) would not affect their respective truth-values (take $p=\bot$ and $r=\top$). For another thing, the arguments above really show that we can construct truth-tellers saying anything we want at any accessible space-time position. More precisely we saw that *for any statements p and r*, we can construct a truth-teller the use of which says (among other things) that p, and does not say that r. So if truth-tellers contained an indexical component, it would have to be quite an extraordinary one. In particular, It would have to behave in a fully unpredictable way. It would not have anything like a Kaplanian ‘character’ regimenting the way its context of use determine its content and its semantic value. We will see that the contextualist understanding of the Truth-Teller is indeed misguided. Truth-tellers are assessment-sensitive (relative) rather than use-sensitive (contextual).