Hard cases of third readings in terms of the standard solution

Introduction. Schwager (2011) and Sudo (2014) argued that there are cases of the so-called third readings of attitude reports, initially discovered in (Fodor 1970), that cannot be accounted for in terms of a theory of indexed world variables (Percus 2000), which is often referred to as the Standard Solution. More complicated alternatives to the Standard Solution have been formulated in terms of evaluating a property in the metaphysically closest worlds where the property is not empty (Schwager 2011), substitution of contextually equivalent functions (Sudo 2014), generalized concept generators (Baron 2016). We argue that all the seemingly problematic cases can be naturally accounted for in terms of the Standard Solution, if we take into account the elided material in the original reports and assume the classical principle of interchangeability of intensionally equivalent expressions in intensional contexts.

Data and discussion. According to the Standard Solution, the sentence in (1b) can be a truthful attitude report, given the context in (1a), if the predicate expensive dress is interpreted w.r.t. the matrix world of evaluation and not in Mary’s belief-alternatives (the so-called non-specific transparent interpretation). The LF proposed for (1b) by the Standard Solution is given in (2a) and the truth conditions in (2b).

(1) a. Context: Mary wants to buy one of Versace dresses she sees in the window of a boutique. She does not know that they are all expensive. The speaker knows this.

b. Mary wants to buy an expensive dress.

(2) a. $\lambda w_1 \text{Mary wants in } w_1 \lambda w_2 \text{PRO to buy in } w_2 \text{an [expensive dress in } w_1 \text{]}$

b. ||(2a)||_{\omega}^d = 1 \text{iff } \forall w' \in \text{Desire-Alt(Mary,} w\text{)}: \exists x (x \text{ is exp.} \text{dress. in } w \& \text{Mary buys } x \text{ in } w')$

The problematic cases include the examples given in (3)b and (4)b.

(3) a. Context: Malte’s jacket is a green Bench jacket. Adrian does not know what kind of jacket Malte has; Adrian wants to buy a green Bench jacket.

b. Adrian wants to buy a jacket like Malte’s.

If we evaluate jacket like Malte’s in the actual world, we will predict that Adrian wants one of the green Bench jackets existing in the actual world. However, this is too strong: in some of his desire alternatives, call it w₂, Adrian might just as well be buying jacket j₁, if it happens to be a green Bench jacket in w₂, even if, in the actual world, j₁ is a red Bench jacket.

(4) a. Context: Mary is looking at the Burj Khalifa, which has 191 floors. No other currently existing building has more floors. Mary doesn’t know this. She also doesn’t know how many floors Burj Khalifa has. She says, ‘Wow, I want to buy a building that’s even one floor higher!’

b. Mary wants to buy a building with 192 floors.

The problem with (4b) is that evaluating building with 192 floors in the actual world will yield an empty set. Thus there will be no world where the existential quantification is true. The report is predicted to be true only if the set of Mary’s desire-alternatives is empty.

Proposal. We observe that in all of the problematic cases the desire report contains elided material. We reconstruct this material and allow it to be evaluated with respect to the evaluation (actual) world. We make use of Frege’s principle of substitutivity given in (5).
(5) \textit{Frege’s principle:} an expression in an intensional context can be substituted by another expression that has the same intension (sense) \textit{salva veritate} (see Frege 1948, p. 219)

For example, (3)b should be read as (6)a and a possible LF for it is given in (6)b. The elided noun has a world variable bound by the matrix abstractor. (We follow Schwager (2011) in assuming that \textit{like} stands for being of the same brand and color.)

(6)a. Adrian wants to buy a jacket like Malte’s jacket.

b. \([\lambda w_1 \text{Adrian wants in } w_1 [\lambda w_2 \text{to buy in } w_2 \text{ a [jacket in } w_2 \text{like in } w_2 \text{Malte’s jacket in } w_4]]]\)

(6)a is a true report in the context in (3)a because (7) and (8) pick out the same set of worlds (assuming that \(w_0\) is the actual world). This is so because, in every world \(w'\), being a jacket like Malte’s jacket in the actual world is being a green Bench jacket in \(w'\). Thus, following Frege’s principle in (5), we can substitute (8) for (7).

(7)[\lambda w_2 \text{PRO to buy in } w_2 \text{ a [jacket in } w_2 \text{like in } w_2 \text{Malte’s jacket in } w_4]]

(8)[\lambda w_2 \text{PRO to buy in } w_2 \text{ a [green Bench jacket in } w_2]]

In case of (4)b, what the speaker picks up directly from the context in (4)a is that Mary wants to buy a building one floor higher than Burj Khalifa. The LF for this report is given in (9).

Following the standard assumptions, we suggest that there is ellipsis in comparatives. The elided predicate comes with a world variable bound by the matrix abstractor,

(9) [\lambda w_1 \text{Mary wants in } w_1 [\lambda w_2 \text{PRO to buy in } w_2 \text{ a building in } w_2 \text{ that is one floor higher in } w_2 \text{ than Burj Khalifa is high in } w_1]]

The report in (4)b is true, because (10) and (11) are equivalent (they denote the same proposition). According to Frege’s principle, substitution of (10) by (11) is valid here.

(10)[\lambda w_2 \text{PRO to buy in } w_2 \text{ a bld. in } w_2 \text{ that is one fl. higher in } w_2 \text{ than B.Kh. is high in } w_0]]

(11) [\lambda w_2 \text{PRO to buy in } w_2 \text{ a building that has 192 floors in } w_2]]

In every possible world, a building that is one floor higher than Burj Khalifa is in the actual world is a building that has 192 floors. Thus, if (9) is a true \textit{de dicto} report picked up directly from (4)a, then the speaker is justified in asserting (4)b because (4)b describes the very same desire that is described by (9), even though Mary would not have used the same words to express it.

This line of argumentation demonstrates that the problematic cases discussed in the literature do not require us to abandon the Standard solution. Importantly, the account proposed here does not violate the Intersective Predicate Generalization that disallows intersecting predicates evaluated in different possible worlds (Keshet 2008). For example, in (9), the elided predicate \textit{is high in } w_1 is not the one that is intersected with the predicate \textit{building in } w_2. The former predicate is just a subconstituent of a bigger predicate \textit{is one floor higher in } w_2 \text{ than Burj Khalifa in } w_1 \text{ that is intersected with building in } w_2.

\textbf{Further predictions.} In our talk, we will go over other problematic cases proposed in Schwager (2011) and Sudo (2014): \textit{Adrian is planning to order a piano like your grandmother’s}, \textit{The reporter wants to interview someone who broke the curfew}, \textit{Mary thinks that Sue is Catholic}. We will show that they can all be naturally derived in terms of the Standard Solution along the lines proposed here.