

## A FRESH LOOK AT ENTITY-DESCRIBING TRANSPARENT FREE RELATIVES

Alexander Grosu, TAU, grosua@tauex.tau.ac.il

### Necessary (not sufficient) conditions for TFR status (inEnglish)

- (1) a. The initial wh-phrase is *what* (or, for some speakers, *who*).
- b. The initial trace of *what* is the subject of a copular structure or small clause (CS) with an overt non-subject XP ('the Pivot').
- c. The relative clause includes an explicit or implicit intensional operator [IOp] with scope over CS (and Pivot).

### Two classes of TFRs: entity-describing, and others. The talk will focus on the former class, which differs from FRs with properties (1a-c) as in (2a-c).

- (2) a. FRs are **definite**, TFRs are **non-specifically indefinite**.
- b. Disagreements between the worlds of evaluation and those of the CP-internal IOp concern **a specific entity independent of the matrix eventuality** in FRs, and **a theta participant in the eventuality** described by the matrix in TFRs.
- c. In TFRs, the Pivot must describe **a counterpart of the TFR at IOp indices**. In FRs, it may describe a property of an entity (as well as an entity).

### (2a):

- (3) a. John is eating [what<sub>i</sub> Mary put t<sub>i</sub> on his plate a minute ago]. **Incontrovertible FR**  
= b. John is eating **the** thing(s) that Mary put on his plate a minute ago.
- (4) a. John is eating [what<sub>i</sub> *might well* [<sub>CS</sub> t<sub>i</sub> be **a juicy steak**]], but I can't be sure. ← **TFR**  
= b. John is eating **something** that might well be a juicy steak, but I can't be sure.

### (2b)

- (5) a. *Context: Bill is crazy, and believes that the garden-gate is a dog/Fido.*  
Alex just bumped into [what<sub>i</sub> *Bill has always thought* [<sub>ZP</sub> t<sub>i</sub> is {**a dog/Fido**}]. ← **FR** =  
b. Alex just bumped into **the** thing that Bill has always thought is a dog/Fido.
- (6) a. Alex just bumped into [what<sub>i</sub> *Bill thought* [<sub>ZP</sub> t<sub>i</sub> was {**a dog/Fido**}], but {he was mistaken, it was in fact a cat/Minnie / I myself am not sure what it was}. ← **TFR** =  
b. Alex just bumped into **something** s.t. Bill thought that **what Alex bumped into** was a dog/Fido.

### (2B) IS A SEMANTIC, NOT A PRAGMATIC DISTINCTION!

- (7) Alex bumped into what Bill thinks is Fido. ← **Ambiguous FR/TFR**
- (8) Alex bumped into what Bill thinks is Fido, but he did not bump into what Bill thinks is Fido.  
← **Non-contradictory sentence**
- (9) **FR, but not TFR.** *Context: Bill thinks that Spot is Fido (because someone lied to him once, and no one ever bothered to tell him the truth). Bill doesn't know there was a bumping event.*

**Paraphrase:** Alex bumped into the thing that Bill mistakenly thinks is Fido (i.e., into Spot), but he did not bump into something that Bill thinks is Fido *in this particular event* (because Bill does not know there was a bumping event).

- (10) **TFR, but not FR.** *Context: Bill thinks Spot is Fido (for the same reason as above). Bill watched the bumping event, but was temporarily blinded by the sun, and could not see clearly what Alex bumped into.*

**Paraphrase:** Alex bumped into something that Bill thinks is Fido (it was in fact Rover), but he didn't bump into the thing that Bill mistakenly thinks is Fido (i.e., he did not bump into Spot).

## (2c):

- (11) a. I was attacked by [what Bill believes was **Fido, a rabid dog**], I personally can provide no information about the attacker.  
 b. I was attacked by [what Bill believes is **rabid**] (#I personally can provide no information about the attacker).  
 (12) a. He invited [what I took to be **Mary, an intelligent girl**] to stay overnight.  
 b. #He invited [what I took to be **intelligent**] to stay overnight.  
*[I return later on to data like (12), which are interesting for an additional reason]*

## MY PROPOSED FORMAL ANALYSIS

### SYNTAX

- (13)  $[\emptyset_{\text{Det}} [\text{CP wh}_i \dots [\text{cs } t_i (\text{BE}) \text{PIVOT } \dots]]]$ . **FR/TFR**

### SEMANTICS

- (14) *Context: Bill is crazy, and believes that the garden-gate is a dog/Fido.* **← FR**  
 a. Alex bumped into [what<sub>i</sub> Bill (irrationally) thinks [z<sub>p</sub> t<sub>i</sub> is {a dog/Fido}].  
 b.  $\lambda w. \text{BUMP-INTO}_w(\text{alex}, \sigma(\lambda x. \forall w' \in \text{THINK}_{w, \text{bill}}: \{[\text{DOG}_w(x)] / [x=f]_{w'}\}))$   
 c.  $\sigma(\lambda x. \forall w' \in \text{THINK}_{w, \text{bill}}: \{[\text{DOG}_w(x)] / [x=f]_{w'}\}) = \text{the garden-gate (in } w)$   
 (15) a. Alex bumped into [what<sub>i</sub> Bill thought [z<sub>p</sub> t<sub>i</sub> was {a dog/Fido}]. **← TFR**  
 b.  $\lambda w. \exists y [\text{Bumped-into}_w(\text{alex}, y) \wedge y = [\sigma_{\langle\langle\langle s, e \rangle, t \rangle, \langle s, e \rangle\rangle}(\lambda \mathbf{x}_{\langle s, e \rangle}. \mathbf{C}(\mathbf{x}))$   
 $\forall w' \in \text{THINK}_{w, \text{bill}}: \{[\exists z. \text{DOG}_w(z) \wedge z = \mathbf{x}(w') / \mathbf{x}(w')=f]\}(w)]$   
 c.  $\lambda w. \exists y [\exists \mathbf{x}(\mathbf{C}(\mathbf{x})) \wedge \text{Bumped-into}_w(\text{alex}, y) \wedge y = \mathbf{x}(w)] \wedge$   
 $\forall w' \in \text{THINK}_{w, \text{bill}}: \{[\exists z. \text{DOG}_w(z) \wedge z = \mathbf{x}(w') / \mathbf{x}(w')=f]\}$   
 d.  $[[\mathbf{C}_{\langle\langle\langle s, e \rangle, t \rangle, \langle s, e \rangle\rangle}] = \lambda \mathbf{x}_{\langle s, e \rangle}. \forall w'' [\mathbf{x}(w'') \neq \perp \rightarrow \text{P}(\mathbf{x}(w''))]]$ .  
 e.  $[[\text{P}]] = \lambda y. [\text{TFR's matrix}]^{\text{TFR}/y}$

## Henk van Riemsdijk's analysis of FRs/TFRs

### SYNTAX:

- (16) a. [Matrix Clause ..... **what<sub>i</sub>** .....] ←FR  
           [CP what<sub>i</sub> ... what<sub>i</sub> ...]  
       b. [Matrix Clause ..... **PIVOT<sub>k</sub>** .....] ←TFR  
           [CP what<sub>i</sub> ... [ZP what<sub>i</sub> (BE) PIVOT<sub>k</sub> ...]...]

**SEMANTICS:** FRs, standard. TFRs: [a] *what* is a dummy, [b] Pivot is an external 'head', [c] CP is a 'hedging' parenthetical modifier of the Pivot.

### CRITIQUE:

#### **Incorrectly predicted self-contradiction:**

- (17) a. Bob bumped into [what couldn't possibly have been Fido]. ≠  
       b. #Bob bumped into Fido, but it couldn't possibly have been it.  
       c. #Bob bumped into, what couldn't possibly have been, Fido.

#### **Incorrectly predicted non-integration**

- (18) a. Alex did not bump into what **Bill** thought was Fido, he bumped into what **Mary** thought was Fido.  
       b. #Alex did not bump into, what **Bill** thought was, Fido, he bumped into, what **Mary** thought was, Fido.  
       c. #Alex did not bump into – so thought **Bill** – Fido, he bumped into – so thought **Mary** – Fido.

#### **Incorrectly predicted quantificational/determinational force of the TFR**

- (19) a. #There is now in the garden Mary's dog.  
       b. There is now in the garden [what John apparently thinks is Mary's dog], but it is in fact Bill's cat.  
       c. #There are now in front of Mary all my dogs.  
       d. There are now in front of Mary [what she apparently thinks are all my dogs], but there is there only a tiny minority of them there.

- (20) **Incorrectly predicted dummy status of cross-linguistic counterparts of *what*.**  
**For illustration, see ARGUMENT 1 below.**

## Arguments of proponents of Pivot-in-the-matrix, and refutations

**ARGUMENT I:** TFRs with a human pivot are compatible with a human denotation, FRs are not (# indicates offensiveness). Therefore, the Pivot is the TFR's head, and *what* is a dummy.

- (21) a. He invited [what I took to be {**Mary, a nice girl**}] to stay overnight. ←TFR  
 b.#He invited [what I took to be **intelligent**] to stay overnight. ←FR with (1)  
 c.#He invited [what was wearing a blue dress] to stay overnight. ←FR without (1)

**Response:** (26a) is OK in English, but offensive in other languages. *What is relevant!*

- (22) #Jean a invité [ce qui semble être {Marie, une jolie fille}]. ← French  
 Jean has invited Dem Czer seems be Marie a pretty girl  
*Intended:* 'Jean invited what seems to be {Marie, a pretty girl}.'  
 (23) #Moshe medaber im ma she yaxol lihyot Miriam. ← Hebrew  
 Moshe speaks with what that could be Miriam  
*Intended:* 'Moshe is speaking with what may well be Miriam.'

## The next four arguments attribute to TFRs properties shared with FRs !

**ARGUMENT II:** The pivot may be an idiom-chunk 'licensed' by a matrix verb, and must thus allegedly be itself in the matrix. In FRs, such discontinuity is disallowed.

- (24) a. They didn't *make*/?\**achieve* [what can reasonably be viewed as satisfactory *headway*].  
 b. \*They didn't *make* [what we attributed to considerable *headway*].

**Response:** *Make* and *headway* need not be clause-mates (see (25)). **More importantly**, (24a) is most naturally construed as a **kind-denoting FR**, paraphraseable by (26a) or (26b).

*Mention Martina Wiltschko and "When Harry met Sally..."*  
*Middle-aged lady to waiter: "I'll have what she had."*

- (25) a. *That* was impressive *headway*.  
 b. I would not call *this* significant *headway*. [*that/this* = *what was made*]  
 (26) a. They didn't *make* [**the**/?**a** kind of *headway* that can reasonably be viewed as *satisfactory*]  
 b. They didn't *make* [**the**/?**a** kind of *progress* that can reasonably be viewed as *satisfactory headway*]

**ARGUMENT III:** Subject *what*-FR requires Singular verb in the FR of (32a), so *what* is allegedly semantically irrelevant for the TFR of (20b). The Pivot must allegedly be its head.

- (27) a. [What I read last summer] { was / \*were } written by Dickens and Hemingway. ← FR  
 b. [What<sub>k</sub> could best be described as [t<sub>k</sub> pebbles]] { were, \*was } strewn across the lawn.

**Response:** Incorrect generalization. Subject *what* of CS is compatible with plural Pivot when the latter describes an **atomic group**, rather than a plurality, in both TFRs and FRs, as well as elsewhere, e.g., *This {looks like / seems to be} pebbles* vs *\*Pebbles seems to form a heap*.

- (28) a. [What seems to Bill to be black pebbles] seems to Mary to be black diamonds. =  
 b. { **Something/the** thing that } seems to Bill to be black pebbles]  
 seems to Mary to be black diamonds.

**ARGUMENT IV:** A matrix antecedent can bind an anaphor within the pivot of a TFR, but not one within an FR. This is taken to support the thesis that a pivot is a matrix element.

- (29) a. They live in [what is often referred to as **each other's backyard**].  
 b. \*They live in [whatever location you used to refer to as each other's backyard]

**Response:** The effect in (22a) also exists in FRs:

- (30) They have just moved out of [what is often referred to as each other's backyard].

**ARGUMENT V: Pivot exhibits Case-matching effect analogous to wh in FRs**

**Response: exactly the same (highly idiolect-restricted) effects are found in ever-FRs.**

- (31) (\*) Ich werde mir kaufen [was als *ein*  
 I will me buy what.NOM as a.NOM  
*passender Wagen* bezeichnet werden kann]ACC.  
 suitable.NOM car characterized be can  
 'I will buy myself what may be characterized as a suitable car.'
- (36) (\*) Ich bin bereit zu kaufen [CPwas *immer* als *ein*  
 I am ready to buy what-ever as a.NOM  
*passender Wagen* bezeichnet werden kann]ACC.  
 suitable.NOM car characterized be can  
 'I am ready to buy whatever can be characterized as a suitable car.'
-

### Epilogue on kind/property/amount FRs/TFRs

Of the properties in (2), only (2a) is relevant, and only **weakly** so. Wrt (2b), Bill does not need to know that ‘this house’ exists, and wrt (2c), CS is one-way implicational, not equative.

In (37), the distinction (2a) exists, as shown in (38), but the distinction in (38b) depends on a pragmatic factor: whether Bill likes a unique type of house, or several types. There is thus a double source for definiteness in (37b): inherent, and pragmatic.

Translations of (37b) in (39), using an extensional variable for simplicity.

- (37) a. Ahmed is finally [what<sub>i</sub> his mother had always hoped [he would be t<sub>i</sub>] some day],  
i.e., a naturalized American citizen. ← FR  
b. This house is [what<sub>i</sub> *Bill would consider* [<sub>zP</sub> t<sub>i</sub> **beautiful**]]. ← FT/TFR
- (38) a. Ahmed is finally **that** which his mother had always hoped he would be some day.  
b. This house possesses {**the / an**} objective property/combination of properties which, if present in a house, suffices for Bill to find it beautiful.
- (39) a.  $\exists P_{\langle e, t \rangle}. \forall x: \text{HOUSE}(x) [P(x) \rightarrow \forall w' \in \text{BILL-VIEW}_w: \text{BEAUTIFUL}_{w'}(x)] \wedge P(h)$  ← TFR  
b.  $[\sigma P_{\langle e, t \rangle}. \forall x: \text{HOUSE}(x) [P(x) \rightarrow \forall w' \in \text{BILL-VIEW}_w: \text{BEAUTIFUL}_{w'}(x)]](h)$  ← FR/TFR?

Time permitting, sketch an analysis of (24a), noting there is no difference in truth conditions between the definite and the indefinite construal.