

# **Semantic relations**

**Taxonomy, Partonomy, Attributes, Roles**

**Bill Croft, January 24, 2025**

# KEY



taxonomic relation



prototype hyponym



other hyperonym-hyponym relation



marginal or not really hyponym



primary partonomic relation



head partonym



other partonomic relation



feature (attribute) relation



role relation

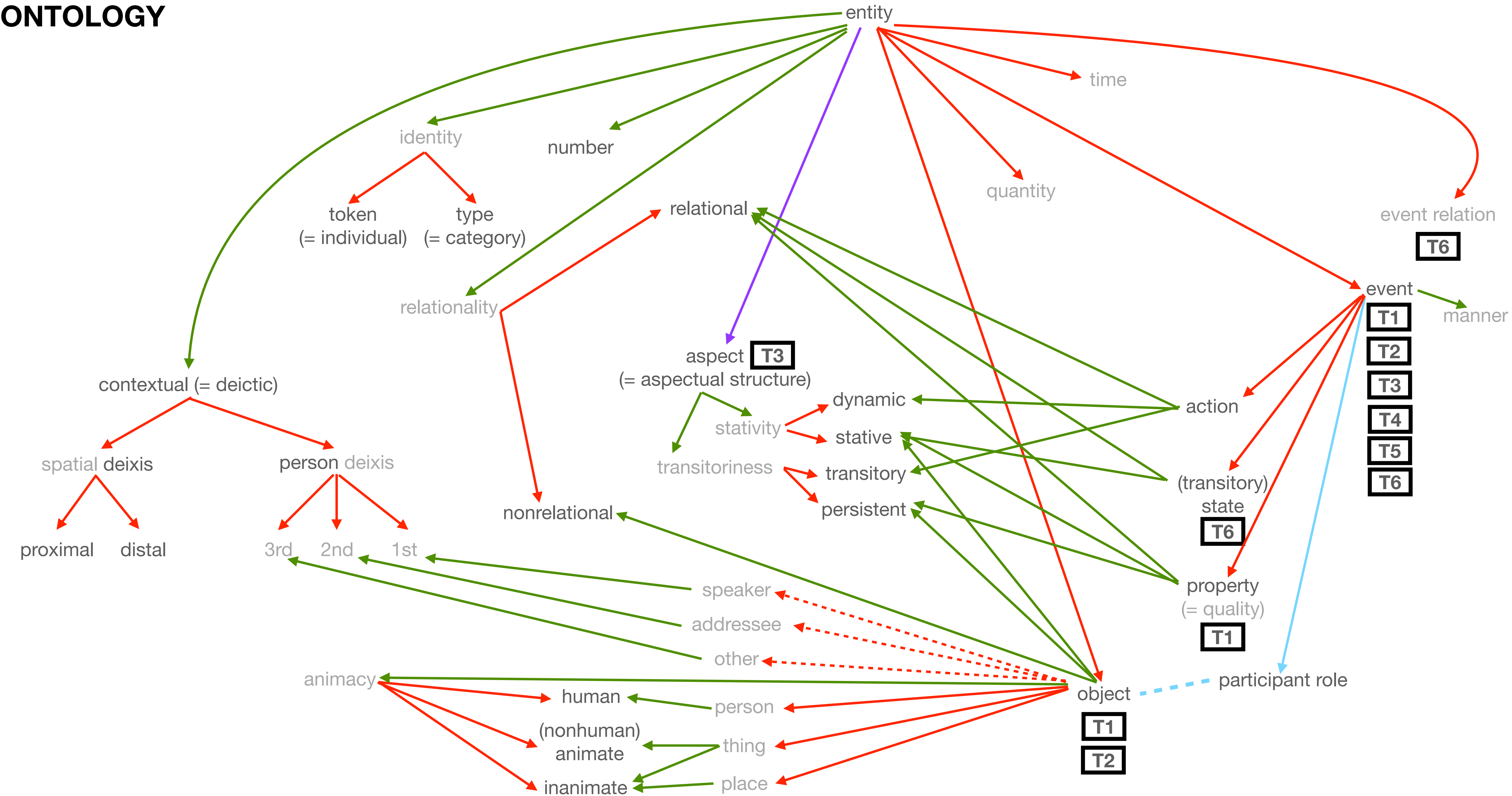
semantic

semantic term not in *Morphosyntax* (but should be)

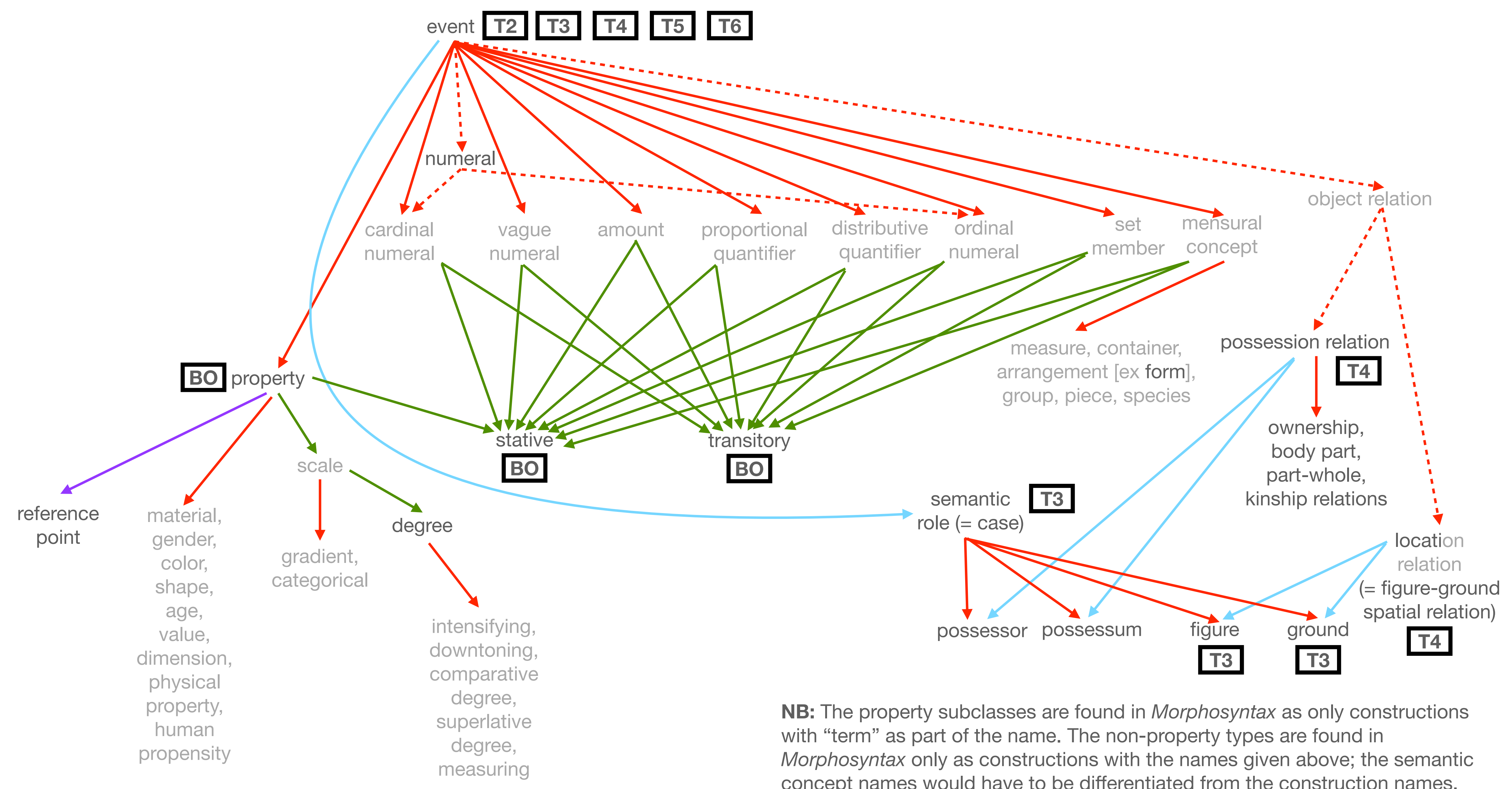


this tree is linked to Tree # at this node

# THE BASIC ONTOLOGY

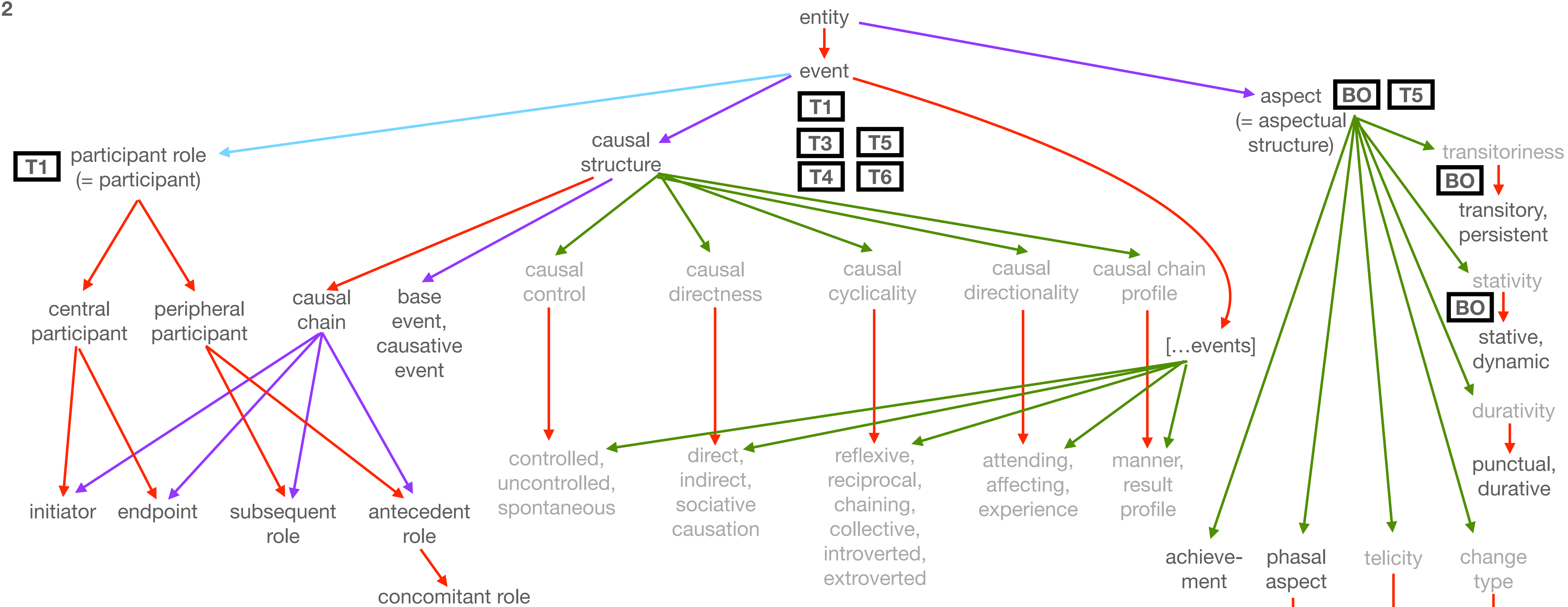


Tree 1



**NB:** The property subclasses are found in *Morphosyntax* as only constructions with “term” as part of the name. The non-property types are found in *Morphosyntax* only as constructions with the names given above; the semantic concept names would have to be differentiated from the construction names.

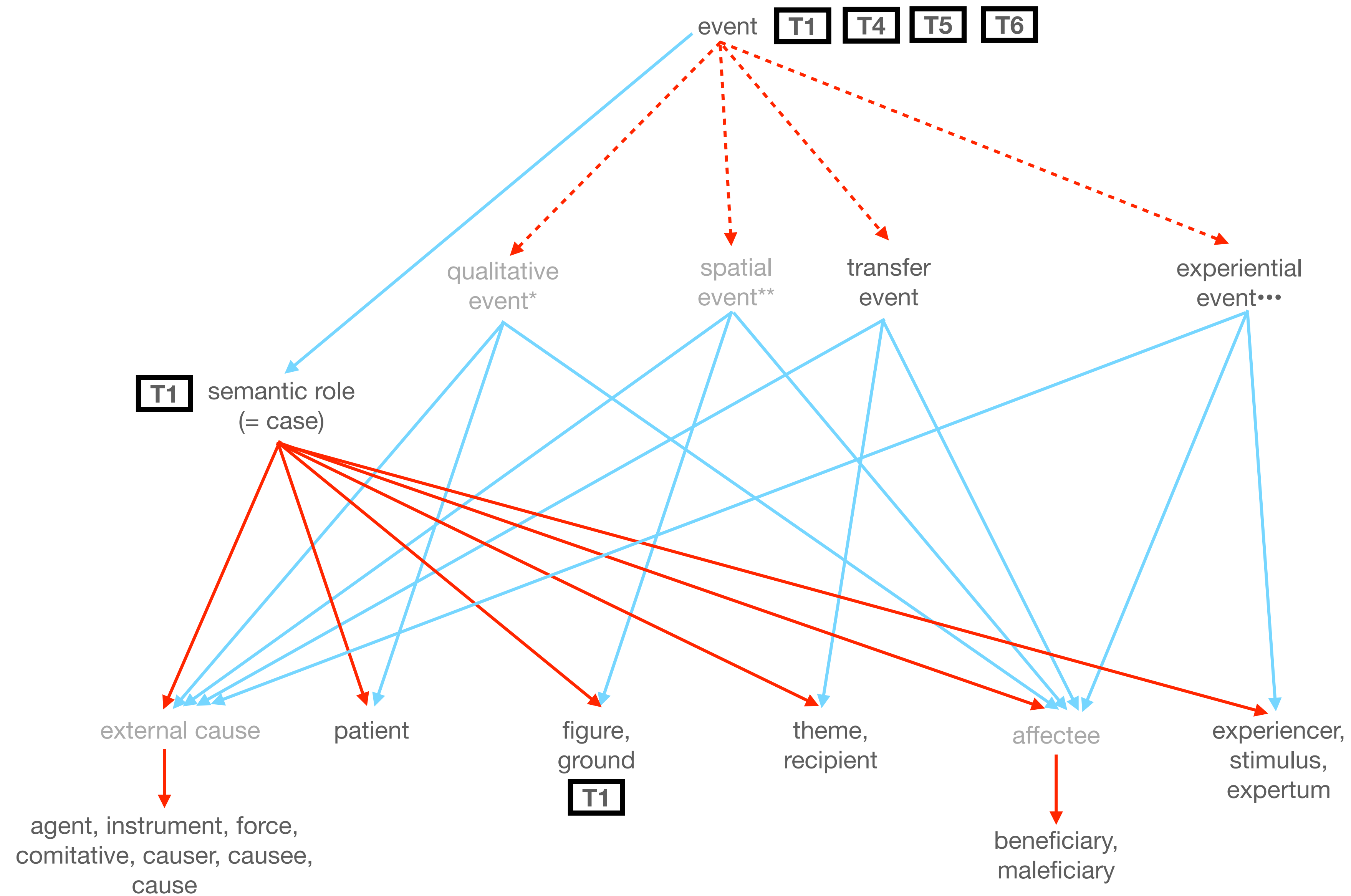
Tree 2



**NB:** The next three trees represent three different semantic analyses of events and their participants. **Tree 2** represents a compositional analysis of the causal and aspectual structure of events and their participants (Croft 2012). Event subtypes defined in terms of causal structure in *Morphosyntax* (as opposed to event semantic domains; see Trees 3-4) are analyzed here as attributes of causal structure (their names are the same as the corresponding events minus “event”). Aspect is also analyzed as an attribute of the aspectual structure of an event. **Tree 3** represents a standard semantic role analysis of event participants, analyzed in terms of event superclasses based on semantic domains that are used to define the roles (unpublished work, from NSF grant #2213804 on Uniform Meaning Representation). **Tree 4** represents a finer-grained classification of events by domain, organized by valency, and the exemplar model of valency-based semantic roles (Haspelmath 2011b, 2015). The classification of events is by no means complete; in particular, social events are not present (for social events, see Kalm 2022 [PhD dissertation]). Events with other events as participants are found in Tree 6. All three analyses have their value, with different typological universals couched in their terms.



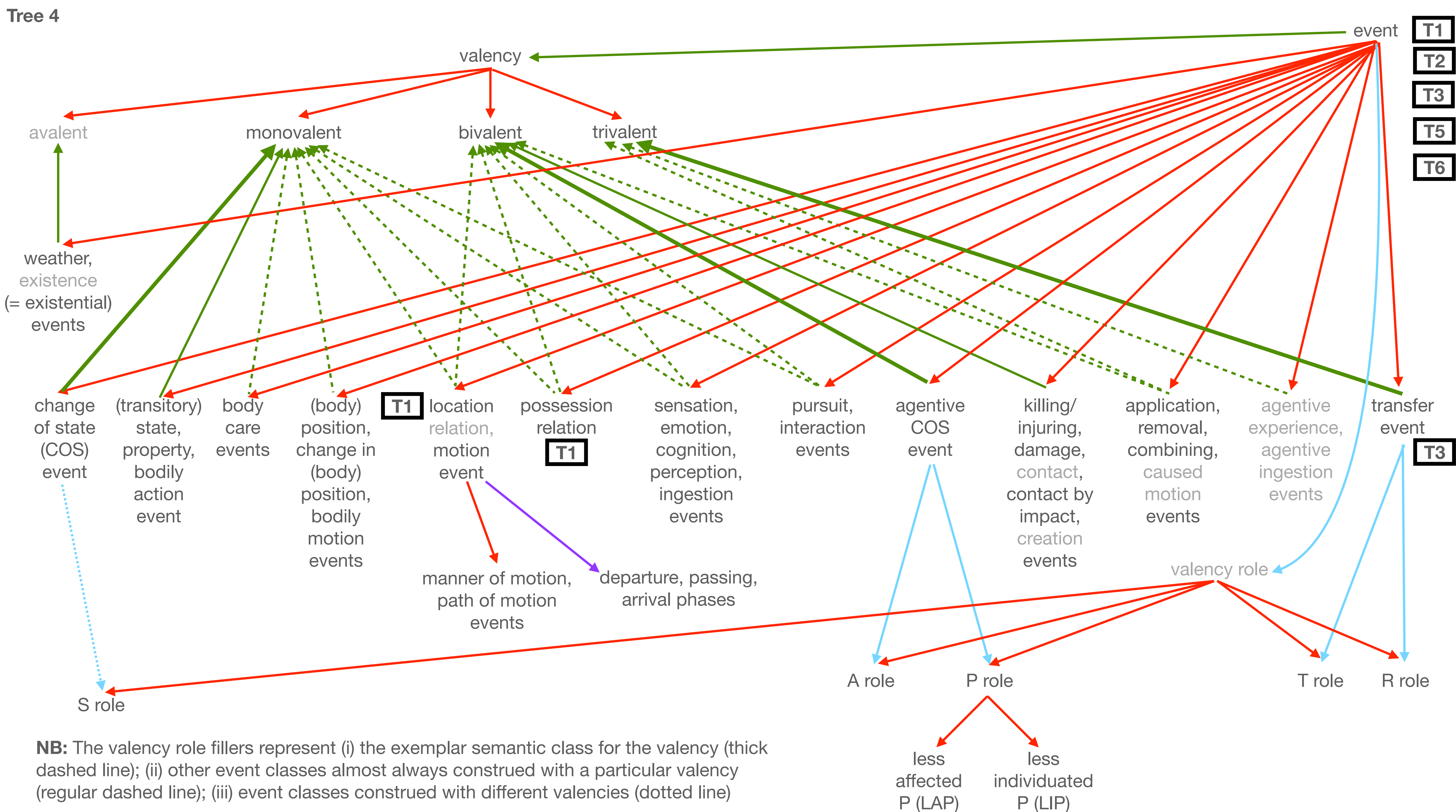
Tree 3



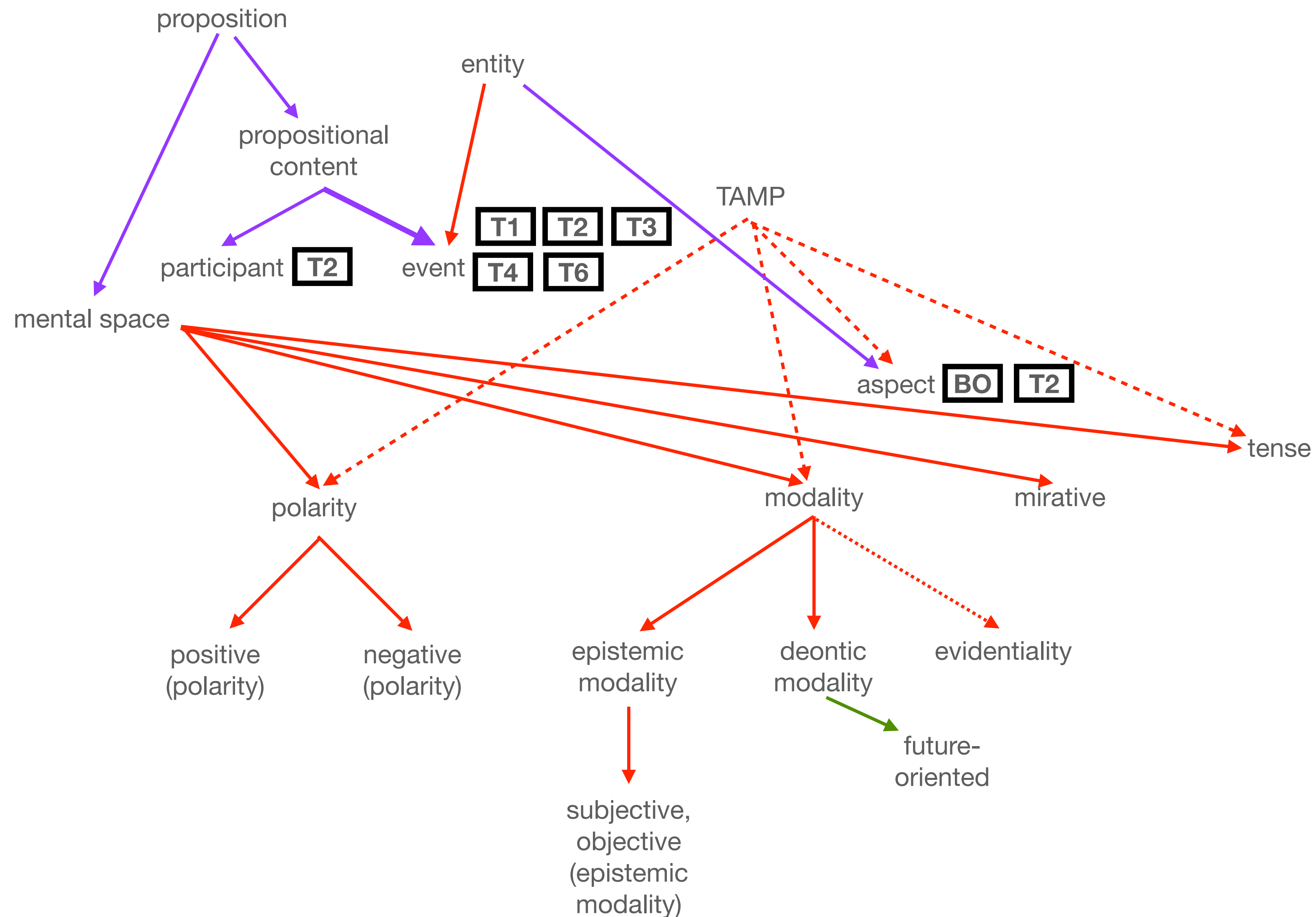
\*includes property, change of state, agentive change of state, contact, contact by impact, creation, killing/injuring, damage events; see Tree 4

\*\*includes location, (change in) (body) position, motion, application, removal, combining, and caused motion events; see Tree 4

\*\*\*includes perception, cognition, emotion, sensation, agentive experience, ingestion and agentive ingestion; see Tree 4



Tree 5



**NB:** The propositional content of a proposition is essentially the same as the event, including its participants (i.e., “who did what to whom”). In *Morphosyntax*, I follow the mental space analysis of propositions and semantic categories associated with propositions. A proposition is essentially an event in a particular mental space, either ‘reality space’ (i.e. a proposition taken to be true by the interlocutors) or a non-real mental space representing polarity, modal/evidential status, or also a particular time. Hence polarity, modality-evidentiality and tense are subtypes of mental spaces. A non-mental space analysis might simply have polarity, modality-evidentiality and tense as attributes of a proposition.



## Tree 6

