

b. $\llbracket(1b)\rrbracket^c \neq \#$ iff $\exists t[\mathbf{time}(c) \in t \wedge \mathbf{alive}(j)(t)]$

We claim that the presupposition of (1a) is weaker than the presupposition of (1b). Specifically, we adopt Altschuler & Schwarzschild's (2012) analysis of stative predicates in which a predicate like **alive** never holds for a single moment alone, i.e. for any moment m_2 , if $\mathbf{alive}(j)(\{m_2\})$ is true, then there is m_1 such that $\{m_1\} < \{m_2\}$ and $\mathbf{alive}(j)(\{m_1\})$ is true (NB: this does not imply that John was alive at every past moment, because there are uncountably many moments).

Suppose now that $\llbracket(1b)\rrbracket^c \neq \#$. Because John is alive at $\{\mathbf{time}(c)\}$, there is a past moment m such that $\mathbf{alive}(j)(\{m\})$ is the case, from which it follows that $\llbracket(1a)\rrbracket^c \neq \#$. On the other hand, when $\llbracket(1a)\rrbracket^c \neq \#$, $\llbracket(1b)\rrbracket^c \neq \#$ might or might not hold, depending on whether John is alive now. Given this asymmetry in the presupposition, the presuppositionally strengthened version of (1a) becomes infelicitous in contexts where the presupposition of (1b) is satisfied. Conversely, (1a) is only felicitous in contexts where the presupposition of its alternative (1b) is not satisfied, i.e. it is not commonly known that John is still alive, $\neg CK(\exists t[\mathbf{time}(c) \in t \wedge \mathbf{alive}(j)(t)])$. We follow Chemla (2008) in assuming that it can be pragmatically strengthened to $CK(\neg \exists t[\mathbf{time}(c) \in t \wedge \mathbf{alive}(j)(t)])$. This is how the LEs of (1a) arises.

This analysis also predicts that (2a) should also exhibit LEs. This is not a problem, because the mechanism of assertive strengthening (4b) could be used instead, in which case, (2a) would presuppose that John is alive now and asserts that John is not ill anymore. So our account predicts that (2a) is ambiguous, and LEs do not consistently follow. For (1a), on the other hand, (4b) would generate the presupposition that John is alive and the additional assertion that he is not British anymore. When one's nationality is assumed to be constant, this would be trivially false, and the other reading with LEs generated with (4a) becomes prominent. When no such assumption is made, the strengthened assertion can be used, as in (3). Finally, (1b) and (2b) have no scalar inferences, as both strengthening mechanisms are vacuous for them due to the lack of stronger alternatives.

Domain restriction: It is known that LEs fail to arise in some contexts where a particular past time is salient, e.g. Musan (1995: 19). To accommodate such examples, we assume that $\exists t$ in (5) has a domain restriction (Kusumoto 1999, Altschuler & Schwarzschild 2012, Thomas 2012), and the restriction stays constant across alternatives. If the domain excludes the current time, then the presupposition of the present tense counterpart becomes trivially false, trivially blocking LEs.

Comparison with previous studies: Our presuppositional analysis straightforwardly accounts for the projective behavior of LEs, e.g. (7) all suggest that John is dead.

- (7) a. It's not the case that John was British
 b. Was John British? c. If John was British, Mary must have met him.

These projection patterns are problematic for Musan (1995,1997), although not necessarily for Magri (2009) and Thomas (2012). An advantage of our analysis over Magri's and Thomas's is our account of LEs in ignorance contexts. Thomas (2012) observes that LEs arise even in contexts in which the speaker asserts ignorance about whether John is dead, giving rise to infelicity, as in (8).

(8) I don't know whether John is dead or alive, ??but if he *was* British, Mary must have met him.

This is straightforwardly accounted for in our analysis, while it is not obvious why (8) is infelicitous under Magri's and Thomas's analyses. Thomas proposes a pragmatic explanation for why the hearer would infer that the speaker knows whether John is dead or alive, but it is not clear why such an inference should be drawn, especially when the speaker asserts that she is ignorant about it, as in (8). Finally, we observe that LEs arise even when an individual-predicate is conjoined with a stage-level predicate, as in (9). We straightforwardly predict the LEs here, as presuppositions project out, while Magri's and Thomas's analyses predict no inference (cf. Magri 2013).

(9) He was British and drunk.

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