(45) a. Leslie **bought** a CD, and Robin ∅ a book.
b. Terry **can go** with me, and Pat ∅ with you.
c. John **wants to try to begin to write** a novel, and Mary ∅ a play.

Gapping has invoked some theoretical controversy in the recent HPSG/CG literature for the 'scope anomaly' issue that it exhibits. The relevant data involving auxiliary verbs such as (46a) and (46b) have long been known in the literature since Oehrle (1971; 1987) and Siegel (1987). McCawley (1993) later pointed out similar examples involving downward-entailing determiners such as (46c).

(46) a. Mrs. J can't live in Boston and Mr. J ∅ in LA.
b. Kim didn't play bingo or Sandy ∅ sit at home all evening.
c. No dog eats Whiskas or ∅ cat ∅ Alpo.

The issue here is that (46a), for example, has a reading in which the modal *can't* scopes over conjunction ('it's not possible for Mrs. J to live in NY and Mr. J to live in LA at the same time'). This is puzzling, since such a reading wouldn't be predicted on the (initially plausible) assumption that Gapping sentences would be interpreted by simply supplying the meaning of the missing material in the right conjunct.

Kubota & Levine (2014; 2016a) note some difficulties for earlier accounts of Gapping in the (H)PSG literature (Sag et al. 1985; Abeillé et al. 2014) and argue for a constituent coordination analysis of Gapping in TLCG, building on earlier analyses of Gapping in CG (Steedman 1990; Hendriks 1995b; Morrill & Solias 1993). The key idea of Kubota & Levine's analysis involves taking Gapping as coordination of clauses missing a verb in the middle, which can be transparently represented as a function from strings to strings of category $\mathrm{S}\uparrow((\mathrm{NP}\backslash\mathrm{S})/\mathrm{NP})$:

(47) $\lambda\varphi.\mathsf{leslie} \circ \varphi \circ \mathsf{a} \circ \mathsf{cd};\ \lambda R.\exists x.\mathbf{cd}(x) \wedge R(x)(\mathbf{l});\ \mathrm{S}\uparrow((\mathrm{NP}\backslash\mathrm{S})/\mathrm{NP})$

A special type of conjunction entry (prosodically of type $(\mathbf{st}\rightarrow\mathbf{st})\rightarrow(\mathbf{st}\rightarrow\mathbf{st})\rightarrow(\mathbf{st}\rightarrow\mathbf{st})$) then conjoins two such expressions and returns a conjoined sentence missing the verb only in the first conjunct (on the prosodic representation). By feeding the verb to this resultant expression, a proper form-meaning pair is obtained for Gapping sentences like those in (45).

The apparently unexpected wide scope readings for auxiliaries and quantifiers in (46) turn out to be straightforward on this analysis. I refer the interested

Kubota & Levine (2020) for a response to Park et al. (2019).

reader to Kubota & Levine (2016a) for details, but the key idea is that the apparently 'anomalous' scope in such examples isn't really anomalous on this approach, since the auxiliary (which prosodically lowers into the first conjunct) takes the whole conjoined gapped clause as its argument in the combinatoric component underlying semantic interpretation. Thus, the existence of the wide scope reading is automatically predicted. Puthawala (2018) extends this approach to a similar 'scope anomaly' data found in Stripping, in examples such as the following:

(48) John didn't sleep, or Mary (either).

Just like the Gapping examples in (46), this sentence has both wide scope ('neither John nor Mary slept') and narrow scope ('John was the one who didn't sleep, or maybe that was Mary') interpretations for negation.

The determiner gapping example in (46c) requires a somewhat more elaborate treatment. Kubota & Levine (2016a) analyze determiner gapping via higher-order functions. Morrill & Valentín (2017) criticize this approach for a certain type of overgeneration problem regarding word order and propose an alternative analysis in Displacement Calculus.

Park et al. (2019) propose an analysis of Gapping in HPSG that overcomes the limitations of previous (H)PSG analyses of Gapping (Sag et al. 1985; Chaves 2005; Abeillé et al. 2014), couched in Lexical Resources Semantics. In their analysis, the lexical entries of the clause-level conjunction words *and* and *or* are underspecified as to the relative scope between the propositional operator contributed by the modal auxiliary in the first conjunct and the boolean conjunction or disjunction connective that is contributed by the conjunction word itself. Park et al. argue that this is sufficient for capturing the scope anomaly in the Oehrle/Siegel data such as (46a) and (46b). Extension to the determiner gapping case (46c) is left for future work.

Here again, instead of trying to settle the debate, I'd like to draw the reader's attention to the different perspectives on grammar that seem to be behind the HPSG and (Hybrid) TLCG approaches. Kubota & Levine's approach attains theoretical elegance at the cost of employing abstract higher-order operators (both in semantic and prosody). This makes the relationship between the competence grammar and the on-line human sentence processing model indirect, and relatedly, it is likely to make efficient computational implementation less straightforward (for a discussion on the relationship between competence grammar and a model of sentence processing, see Chapter 27). Park et al.'s (2019) approach on the other hand is more in line with the usual practice (and the shared spirit)