Notes on Jackendoff 1971 “Gapping and Related Rules”

The simplest cases of Gapping delete the verb of one or more clauses conjoined to the right of a clause containing the same verb:

(1) a. Max ate the apple and Sally the hamburgers.
    b. Ivan plays krummhorn. Boris fluecelhorn. and Schwarz bassethorn.

The conditions on Gapping can be conveniently divided into two types: those concerning the connection between the two clauses, and those concerning the structure and permissible deletions in the second clause. The former are fairly easy to specify: Gapping occurs only when the clauses are connected by the coordinating conjunctions and, or, and nor:

(4) a. Sam plays the sousaphone, and Max the saxophone.
    b. Either Sam plays the sousaphone or Jekyll the heckelphone.
    c. Sam doesn’t play sousaphone, nor Medusa sarrusophone.

Many speakers also find but an acceptable conjunction:

(5) Bill ate the peaches, but Harry the grapes.

Gapping does not occur with subordinating conjunctions:

(6) a. *Sam played tuba whenever Max sax.
    b. *McTavish plays bagpipe despite the fact that McCawley the contra-fagotto d’amore.

Now let us observe conditions on the rule which involve the content of the gapped clause. For convenience, call the material deleted “the gap”. Gapping cannot take place if there are unlike auxiliaries:

(10) a. *John has written the words, and Paul \{will is\} the music.

    b. *Tom will smoke the grass, and Reuben \{might has is\} the hash.

<To the extent that these judgments are correct, we might be dealing with a situation where the identity requirement extend beyond the deletion site itself. On the other hand, it might just be a property of Gapping that ALL the verbal stuff must delete. Note too that some of these examples look like Pseudogapping, which is often reported as OK.>

If the auxiliaries are alike, Gapping must delete the second auxiliary as well as the verb: if the auxiliaries in the second clause of (10)-(11) are removed, the interpretation of the gap includes both the verb and the auxiliary of the first clause:

(11) a. John has written the words, and Paul (*has) the music.
    b. If the ants were called elephants and elephants (*were) ants, I’d be able to squash an elephant.

Gapping cannot tolerate unlike adverbs preceding the verb, either:

(12) a. *Simon quickly dropped the gold, and Jack suddenly the diamonds.
    b. *Max sometimes beats his wife, and Ted frequently his dog.

But at least sometimes the gap must include an adverb of the first clause. The gaps in (13) are quickly drops and sometimes beats, not just dropped and beats:

(13) a. Simon quickly dropped the gold, and Jack the diamonds.
    b. Max sometimes beats his wife, and Ted his dog.
Not everything in the VP to the left of the verb can gap, however. Ross points out that a negation in the auxiliary cannot gap; (14a) does not become (14b):

(14) a. I didn’t eat fish, Bill didn’t eat rice, and Harry didn’t eat roast beef.
    b. *I didn’t eat fish, Bill rice, and Harry roast beef.

Rather the form with nor must be used, as in (4c).²

Gapping possibilities are affected by the material to the right of the verb as well. Note first of all that identical NPs or PPs next to the verb can gap, if followed by another constituent:

(15) a. John writes poetry in the garden, and Max in the bathroom.
    b. Paul Schachter has informed me that the basic order in Tagalog and related languages is VOS; Ives Goddard that the unmarked order in Algonkian is OVS; and Guy Carden that the basic order in Aleut is OSV. (Ross 1967a)

<For (15)b, I wonder if the pronominal nature of the 1st object is somehow relevant. If I change the antecedent clause to “Paul Schachter has informed Ross that the basic order in Tagalog and related languages is VOS”, I’m not sure I still get Gapping (i.e., a reading where Goddard and Carden informed Ross … In the Sag 1976 HO we will see Hankamer’s 1973 discussion of this point.>.

One exception seems to be the case where the verb is followed by a noun phrase or prepositional phrase and an infinitive. As Ross points out, Gapping of the NP or PP is unacceptable:

(16) a. *I want Bob to shave himself, and Mary to wash himself.
    b. *Bill is depending on Harry to find the way to the party, and Sue to find the way home. (where the gap is is depending on Harry)

Note that if the verbal complement is only an infinitive, Gapping of the verb is permitted:

(17) Bob tried to wash himself, and Mary to read the funnies.

Somewhat more remarkable is the fact that identical NPs, PPs, clauses, and infinitives not adjacent to the verb can gap, given proper contrastive stress in the first clause:

(18) a. Arizona elected Goldwater Senator, and Pennsylvania (;) Schweiker.
    b. Max writes poetry in the bathroom, and Schwarz radical pamphlets.
    c. Maytag will give a brand new dryer to the winner of the Mrs. Albania contest, and General Electric (;) four hundred light bulbs.
    d. Ralph told Dick Deadeye that Little Buttercup sold treacle, and Sir Joseph (;) the Captain.
    e. Jack begged Elsie to get married, and Wilfred (;) Phoebe.

<Very reminiscent of what we briefly saw with Pseudogapping. Perhaps the solution should be the same? That is, that the survivors have moved out of a to be deleted constituent.>
One more unusual property of Gapping has been pointed out by Ross (in a Forum Lecture at the 1969 Linguistic Institute). Any number of embedded infinitives can delete, as long as one unlike constituent remains:

(20)  Max seemed to be trying to begin to love Harriet, and Fred ((to be trying) to begin) to love Sue.

What Ross did not point out is that the unlike constituent may be an NP somewhere among the infinitives, given proper stress:

(21)  Max seemed to be trying to force Ted to leave the room, and Walt (,) Ira.

The constraint noted in (16) seems to apply here too: if among the embedded infinitival complements there is one of the form \( NP \cdot VP \), only the NP can remain. Contrast (21) with (22), where the infinitive remains:

(22)  *Max seemed to be trying to force Ted to leave the room, and Walt to stay a little longer. (where the gap is seemed to be trying to force Ted)

So far we have only looked at examples with one unlike constituent to the right of the verb. With two unlike constituents, the acceptability of Gapping varies. With two NPs the result is marginal at best:

(23)  a. *Arizona elected Goldwater Senator, and Massachusetts (,) McCormack (,) Congressman.
    b. *Millie will send the President an obscene telegram, and Paul (,) the Queen (,) a pregnant duck.

Likewise with a noun phrase plus a clause or infinitive:

(24)  a. *Schachter informed Haj that Tagalog is VOS, and Goddard George that Algonkian is OVS.
    b. *Frank forced Tom to shave himself, and Sam (,) Harry (,) to watch.

With a complement NP-PP, sentences with gapped verbs are rather poor if the PP is strictly subcategorized by the verb (25a, b), somewhat better if the PP is not strictly subcategorized (25c, d):

    b. ?Maytag will give a brand-new dryer to the winner of the Mrs. Albania contest, and General Electric four hundred light bulbs to the loser.
    c. ??Ivan writes in the bedroom and Schwarz radical pamphlets in the bathroom.
    d. ??Charlie entered the bedroom at 5:30, and Vera the kitchen at 6:00.

<Jackendoff suggests that all of (23)-(25) are out "thus enabling us to state the Gapping rule more simply. The fact that they are at all good would be attributed to an illegitimate mixture of the effects of Gapping and Conjunction Reduction”.

(26)  a. Arizona elected Goldwater Senator and Massachusetts McCormack.
    b. Arizona elected Goldwater Senator and McCormack Congressman.
Similarly for the others in this set. Conjunction Reduction is OK for all of them:

(25)a' Willy put the flowers in a vase and the book on the table.
(25)c' Ivan writes plays in the bedroom and radical pamphlets in the bathroom.

etc. There is a tradition, starting with work of Kayne in the early 1980's, to argue that the conjuncts here are single constituents, in line with a requirement of binary branching.

Jackendoff then observes the striking differences between Gapping and other ellipsis processes, especially VP-deletion.

“VP-Deletion ... differs from Gapping in that it can take place with a relatively wide range of connections between the two sentences:”

(32) a. Charlie will leave town if his mother-in-law doesn’t.
    b. Whenever Russia has made a major political blunder, the U.S. has too.
    c. Tom swam the English Channel because he believed that Suzy expected him to show her that he could.

Like pronominalization, VP-Deletion can (at least sometimes) delete the left-hand verb phrase if it is in a subordinate clause.

(33) a. Anyone who can (,) should show me how to wiggle my ears.
    b. If he hasn’t yet, John should try to climb the Eiffel Tower.

Thus VP-Deletion is clearly distinct from Gapping.

Jackendoff goes on to show many parallels between VP-Deletion and N’-Deletion, and between Gapping in sentences and in nominals (part of his argument that N-Gapping and N-Deletion are separate rules).

“N-Gapping is most felicitous when the two noun phrases are joined by and, either-or, or neither-nor.” <Though I don’t find ones like (47) as bad as corresponding sentential ones.>

(46) a. Either Ted’s gin from New Jersey or Bill’s from Iowa will satisfy the uneducated palates of our guests.
    b. Neither Szell’s recording of Beethoven’s 6th on Columbia nor Klemperer’s on Angel has the right tempo.

It is a good deal worse when the noun phrases are more distantly related, although exaggerated intonation sometimes helps:

(47) a. *Tureck’s performance of Bach on the piano doesn’t please me anywhere as much as Landowska’s on the harpsichord.
    b. *Tom’s dog with one eye attacked Frank’s with three legs.
    c. *I borrowed Fred’s diagram of a snake’s fang because Steve’s of a spider’s eye had been stolen.

N-Gapping certainly cannot take place when the gapped NP precedes its antecedent, even if it is in a subordinate clause:

(48) a. *Anyone who likes Landowska’s on the harpsichord should listen to Tureck’s version of the Well-Tempered Clavier on the piano.
    b. *Because Steve’s of a spider’s eye had been stolen, I borrowed Fred’s diagram of a snake’s fang.

Jackendoff goes on to argue that by using distinctive features we can collapse the clausal and nominal versions of the rules at issue, but, unless I’m missing something, he doesn’t actually do it.