

The meaning of punctuation: Interlexical realisations of logico-semantic relations in Swedish

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Abstract: Sentence-internal punctuation marks are rarely used clause-internally and more often delimit clauses from other clauses and non-clausal *supplements*. The present study explores how thusly delimited clauses and supplements semantically relate to their *frame* clause. These *supplement structures* are treated as clause complexes, regardless of the form of their segments, and analysed using SFG’s logico-semantic relations, with a focus on the quantitative differences between sentences based on the delimiting punctuation mark: *colon, dash or parenthesis*.

The most common logico-semantic relation marked by these punctuation marks is Elaboration, reflecting that the three punctuation marks are more or less interchangeable in appositions. But there are significant quantitative differences between the marks: Elaboration is more common with parentheses, while dash to a higher degree marks Extension and Enhancement, and colon often marks projection—including Interpersonal projection, which is here presented as a relation type on its own. From a methodological and theoretical point of view, a clear result is also the fact that the relations between clauses and non-clausal supplements are highly receptive to logico-semantic analysis, despite this generally being reserved for the relations between clauses. The study paves the way for a wider application of the system of logico-semantic relations in the future.

Keywords: punctuation, logico-semantic relations, extra-clausal constituents, corpus linguistics

1. Background

The prototypical punctuation mark, the period or full stop ⟨.⟩, is most often used to mark the end of a sentence, much like the question mark ⟨?⟩, exclamation point ⟨!⟩ and, occasionally, ellipsis points ⟨...⟩. The remaining punctuation marks are sentence-internal, typically delimiting the segments of clause complexes. These segments may be clauses as well as non-clausal supplements such as appositives, dislocations and other clause-external elements (Huddleston & Pullum 2002; Potts 2005; Kaltenböck et al. 2011). It follows that one can find clause-external supplement constructions in a text corpus by searching for sentence-internal punctuation marks; only rarely are clause-internal constituents actually set off by punctuation marks (cf. Dawkins 1995). In the present study, I use the term *supplement* linearly, referring to the second segment in these structures, regardless of its form. The first segment is called the *frame*. The structure is illustrated by the constructed sentences in Figure 1 (cf. Katourgi 2024).

Figure 1: The supplement structure, with colon, dash and parenthesis.

Frame	Supplement	Frame
<i>Lisa met the manager</i>	<i>: Jonas Carlsson</i>	<i>.</i>
<i>She shook his hand</i>	<i>– for a bit too long –</i>	<i>with a smile.</i>
<i>He smiled</i>	<i>(or winced?)</i>	<i>back at her and moved on.</i>

Being clause-external, non-clausal supplements can generally not be considered hypotactic to their frame; syntax studies suggest that these supplements indeed are more or less syntactically independent from the adjacent clause (e.g. de Vries 2009; Döring 2015; Ott & de Vries 2016). This entails that the relation between a clausal frame and an extra-clausal supplement may be analysed

similarly to that between two clauses in a clause complex, a principle that systemic-functional grammar (SFG) already applies to appositives (Halliday & Matthiessen 2014; cf. Renkema 2009).

Sentence-internal punctuation marks are often described not only as delimiting, but as conveying particular semantic and pragmatic features, which perhaps vary depending on the punctuation mark used (Quirk et al. 1985; Nunberg 1990; Bredel 2008; Patt 2013). The semantic differences and similarities between these punctuation marks is not entirely clear, but descriptive punctuation studies find that the rules in style guides seldom satisfactorily reflect actual usage (Dawkins 1995; Karhiho 2003; Dahl 2015; Rössler et al. 2022), making them an unreliable source of comparison. Similarly, the realisation of logico-semantic relations in language use is comparatively underexplored in SFG studies (cf. Matthiessen & Teruya 2024).

In the present study, I aim to fill this gap by analysing the logico-semantic relations between text segments demarcated by the punctuation marks *colon* (:), *dash* (–) and *parenthesis* or curved brackets (()) in Swedish newspaper text. The sentences in which these appear are here dubbed *supplement structures*, their segments being the frame and the supplement. The aforementioned punctuation marks are selected as they are often described as particularly semantically marked (Dawkins 1995; Jones 1996; Patt 2013); the exclusion of the remaining two sentence-internal marks, the comma (,) and semicolon (;), is because the former may delimit intra-clausal constructions, such as enumerated words or groups, while the latter mainly delimits clauses from other clauses, rather than non-clausal elements.

My research questions are the following:

- What logico-semantic relations are marked by colon, dash and parenthesis?
- How do the three punctuation marks differ from each other quantitatively with regards to logico-semantic relations?

Before I can begin, an overview—and overhaul—of the system of logico-semantic relations will be necessary.

2. Logico-semantic relations

In Halliday & Matthiessen (2014), the logico-semantic relations are split into two main types: expansion and projection. Expansion is described as the relation between two clauses expressing *phenomena*, representations of real or potential occurrences in the text world, while projection is described as the relation between one clause expressing a phenomenon and one clause expressing a *metaphenomenon*, that is, a representation of a linguistic utterance. In other words, expansion is the relation between clauses on the same order of experience, while projection is the relation between clauses on different orders of experience (Halliday & Matthiessen 2014: 443).

But this description does not fully hold as we read further into Halliday & Matthiessen (2014: 537) and are introduced to the category of *facts*: clauses that *are* projections without *being* projected by other clauses. This suggests that projection is not only a *relation* between clauses but a potential *state* of some clauses. This does not have to be a problem: if clauses that express metaphenomena are by definition projections, then they are also projected in relation to other clauses, since the contents of a clause cannot be interpreted as a metaphenomenon without relating to another clause. It does, however, mean that projection is not necessarily the relation of being projected through a verbal or mental process, as they are first described (Halliday & Matthiessen 2014: 509).

The next issue arises when we are introduced to *interpersonal projection*, a relation between modal expressions and the clauses they modify or modulate. Among others, this includes Adjuncts such as *surely*, verbs such as *should*, and—perhaps most important for my purposes—nexuses such as *I reckon*. Interpersonal projection means that the speaker is projecting their own utterance, which

also suggests that any difference in order of experience is purely metaphorical (Halliday & Matthiessen 2014: 698–701). This corresponds to what is elsewhere in Halliday & Matthiessen (2014: 611) called *internal relations*, as the projecting element does not relate to the experiential contents of the projected element; it simply positions it as an utterance, in the text or context. So, the difference between expansion and projection might be better expressed thus:

Expansion is the relation between the experiential contents of two segments (clausal or not), and

Projection is the relation between the experiential or interpersonal contents of one segment and the utterance of another segment (or itself).

In short: expansion is the relation to the *contents* of a segment, while projection is the relation to the *utterance* of a segment.

It is with this understanding of the logico-semantic relations that I approach the present study. If a colon, dash or parenthesis (or pair thereof) delimits a segment from one that comments upon its utterance, form or speech act, this is classified as projection. The traditional subtypes of projection are the dichotomies locution–idea and quote–report, but note that the former is a purely experiential distinction while the latter has more to do with syntax than semantics, at least in English and Swedish (Teleman et al. 1999; cf. Arús-Hita et al. 2018). I instead make use of the label *Interpersonal projection* for such projection where the speaker is commenting or characterizing their own utterance in the here-and-now, and simply use *Ideational projection* for the more prototypical type of projection where a mental or verbal clause (or *according to*-phrase) is quoting or reporting another with a different origin.¹ For expansion, I use the three traditional types, Elaboration, Extension and Enhancement. The relations used to label the supplement structures in the present study are summarized in Figure 2 below. *P* and *Q* stand for (the semantic contents of) the frame and the supplement, though not necessarily in that order.

Figure 2: Logico-semantic relations.

	Relation	Description	Example
EXPANSION	Elaboration	Q specifies or restates P or some element thereof	<i>Alice had sencha: a type of tea.</i>
	Extension	Q adds a new proposition beyond or instead of P	<i>Alice had tea—Elsa had coffee.</i>
	Enhancement	Q embellishes the circumstances around P	<i>Alice had tea (she was so tired).</i>
PROJECTION	Ideational	P quotes or reports Q as a wording or meaning	<i>Alice said: “I’m getting more tea.”</i>
	Interpersonal	P comments or characterises Q as an utterance	<i>In conclusion—Alice loves tea.</i>

The order of segments in the examples of Figure 2 is different between expansion (expanded–expanding) and projection (projecting–projected), but these patterns are not universal. Indeed, the order of the segments in logico-semantic relation is language-dependent and heavily associated with

¹ I use the term *Ideational projection* rather than the more specific *Experiential projection* in order to clearly distinguish the terms for the types of projection from the term *expansion* and its sub-types.

taxis and relation type (Arús-Hita et al. 2018).

As a consequence of my definitions, I view metaphorical projection—such as facts—primarily as interpersonal (see also Halliday & Matthiessen 2014: 676–678). Facts are considered projection in Halliday & Matthiessen (2014) but also display traits of expansion: in *the fact that she left*, *the fact* is further Elaborated on in the clause *that she left*. Following this logic, structures with both expanding and projecting features are only considered projection: the defining feature is (difference in) order of experience. Facts typically do not take punctuation marks, but they more commonly occur in metaphorical projection such as (1), from my corpus (introduced in section 3 below).

- (1) *Mer om handlingen: "En kropp hittas flytande i vattnet i närheten av Liljeholmen. [...]"*

(Retriever n.d. [Expressen 2021])

More about the story: "A body is found floating in the water near Liljeholmen. [...]"

There is an Elaborating (appositive) relation between the supplementary quoted clause and the framing nominal group, but as the clauses belong to different orders of experience, the more pertinent relation here is the Interpersonal projection, which is the only label used in my analysis (see also Mann & Matthiessen 1991; Bateman & Rondhuis 1997). Following a similar logic, semantically more specific relations take precedence over less specific ones; Renkema (2009: 155–156) considers Enhancement the most specific and Elaboration the least specific of the expanding relations, providing a clear hierarchy for labelling logico-semantic relations in ambiguous cases. This hierarchy is also illustrated in Figure 2 above, with more specific relations being further down. In the present study, I explore data from Swedish, for which such patterns have not been previously described. Furthermore, the tactic relations in the structures under study are unclear: while I consider them paratactic as a matter of course, this is not self-evident. For example, appositive (non-defining) relative clauses are considered hypotactic in SFG, while other appositives are considered paratactic (Halliday & Matthiessen 2014: 383, 559) – and in traditional grammar, both are generally considered hypotactic. In short, the segments are assumed to be able to occur in any order for the purposes of the present study.

3. Corpus data

I perform my study on Swedish newspaper text. This data is chosen as it can be assumed to represent a neutral standard language that also serves as model language to a wide readership. While there may be much to say about the punctuation in less formal contexts, there is currently no extensive description of the use in formal or neutral Swedish to use as a base of comparison. The present study partially serves to establish such a base for future studies on punctuation and logico-semantic relations.

Using the commercial tool *Mediearkivet* ('The Media Archive', Retriever n.d.), I have gathered a corpus of texts published during 2021 in any of the four largest newspapers in Sweden: *Aftonbladet*, *Dagens Nyheter*, *Expressen* and *Svenska Dagbladet*. I exclude more technical texts by limiting the corpus to the four major subjects: *crime and law*, *culture and entertainment*, *politics* and *sports*. While *Mediearkivet* has each text annotated by subject, it does not offer any way to distinguish between different *genres* of text; this unfortunately means that news articles, editorials, op-eds, reviews, columns and so forth are not distinguished in my corpus.

I have further limited my study to body texts, excluding headlines, bylines and so forth from the corpus, as well as very short articles that do not have many opportunities to use punctuation in the first place. The corpus has been split into 16 subcorpora, one for each combination of newspaper and subject, and from each of these I have collected 32 evenly distributed sentences per punctuation mark. This gives a total of 1,536 supplement structures overall: 512 colon structures, 512 dash

structures and 512 parenthesis structures. The structures have been analysed one by one and labelled for the logico-semantic relation between the text segments delimited by the punctuation mark(s) in question.

4. Results

The results of my analysis are presented quantitatively, with illustrative examples provided. The punctuation marks, or the supplement structures in which they are used, are presented in separate subsections, with a summarizing comparison at the end.

4.1. Colon structures

The distribution of logico-semantic relations in colon structures is shown in Table 1.

Table 1: Relations in colon structures.

Relation type	Σ	%
Elaborating exp.	220	43.0
Ideational proj.	145	28.3
Interpersonal proj.	116	22.7
Enhancing exp.	29	5.7
Extending exp.	1	0.2
<i>no relation</i>	1	0.2
TOTAL	512	100

Elaboration is the single most frequent relation type in these structures, agreeing with what Halliday & Matthiessen (2014: 464) says about the colon being a common indicator of apposition. On the other hand, Enhancement and Extension are rare, making expansion overall less common than projection. This is also to be expected, as the colon is often used for quotes, in Swedish as well as English (Huddleston & Pullum 2002: 1743; Karlsson 2017: 209). Less expected is the fact that almost half of all projecting structures use Interpersonal rather than Ideational projection; this meta-communicative usage of the colon has garnered limited attention in previous research (but see e.g. Karhiahio 2003: 28–29), and the results indicate that future studies are warranted.²

A typical example of Ideational projection around a colon is given in (2). (3–4) instead illustrate Interpersonal projection. Double slashes indicate a line break.

- (2) *Han undrar: // – Ska jag behöva byta namn?* (Retriever n.d. [Aftonbladet 2021])
‘He wonders: “Will I have to change my name?”’
- (3) *Låt oss säga så här: Varberg kan bli en X-faktor.* (Retriever n.d. [Aftonbladet 2021])
‘Let’s put it this way: Varberg might end up being an X factor.’
- (4) *Fotnot: Olle heter egentligen något annat.* (Retriever n.d. [Expressen 2021])
‘Footnote: Olle is actually named something else.’

² In fact, when Halliday & Matthiessen (2014: 700) illustrate interpersonal projection, they ignore a frame separated from the message proper by a colon. I give their example here with the relevant segment italicized:

(i) *Let’s be clear:* I personally favour the initiative and ardently support disarmament negotiations to reduce the risk of war. [...]

In my opinion, this is a very clear example of Interpersonal projection across segments in a clause complex.

(3) has the formal characteristics of Ideational projection, but the two segments do not exist on separate orders of experience: both are expressed here and now, and the former is merely framing the latter. The same can be said about (4), where the one-word frame functions similar to a headline that labels the clausal supplement, relating it to the rest of the text. The labelling relation is also Elaborating, as the contents of the footnote are *identified* as the meaning of the supplementary clause, but as it is a label of the utterance itself, I consider this an Interpersonal projection, and only apply this more specific label for the purposes of the quantitative analysis.

Moving on to the solely expanding relations, Elaboration is illustrated in (5) and (6).

- (5) *Hans ilska riktar sig mot två mål: den brittiska pressen och fadern.* (Retriever n.d. [Svenska Dagbladet 2021])

‘His anger is aimed at two targets: the British press and his father.’

- (6) Det gäller alla prylar som kan koppla upp sig mot ditt lokala [nätverk]: routrar, tvättmaskiner, smarta dörrklockor, högtalare, lampor, spelkonsoler och så vidare. (Retriever n.d. [Aftonbladet 2021])

‘This applies to all gadgets that can connect to your local network: routers, washing machines, smart doorbells, loudspeakers, lamps, gaming consoles and so on.’

In (5), the supplement serves as an exhaustive identification of the nominal group *two targets*, while in (6), it is a non-exhaustive subset of *all gadgets that...*, as indicated by *and so on*. This maps to SFG’s two main types of intensive relational processes: identifying and attributive. In the system of conjunction, these are expressed as *expository* and *exemplifying* and joined by the third type, *clarifying*. However, clarifying relations typically also involve some amount of explanation or contrast—Enhancement or Extension—so under a hierarchical model, clarifying relations cannot typically be considered Elaboration.³ Using the experiential distinction into identifying and attributive, the former is somewhat more common here, with 118 structures displaying an identifying relation and 102 displaying an attributive one.

We find the occasional Enhancement relation in colon structures, as in (7).

- (7) *Hans djupa engagemang för frihetskampen i Algeriet tycktes oförenligt med litterärt skapande: var det inte obscen att syssla med sina dikter när människor samtidigt torterades till döds av ens egna landsmän?* (Retriever n.d. [Svenska Dagbladet 2021])

‘His deep engagement in the fight for freedom in Algeria seemed irreconcilable with literary creation: was it not obscene to occupy yourself with your poems at the same time as people were being tortured to death by your own countrymen?’

As a clarifying relation, (7) is not categorized as Elaboration; clarification entails a level of explanation, or Enhancement, and thus the more specific label is used. More common in my data is that Enhancement in colon structures looks like (8).

- (8) *Inte heller Region Jämtland/Härjedalen bedömer att man kommer att hinna: // ”Inte med nuvarande leveranstakt. [...]”* (Retriever n.d. [Aftonbladet 2021])

‘Region Jämtland/Härjedalen likewise do not estimate that they will make it in time: “Not at the current rate of delivery. [...]”’

³ In Renkema’s connectivity model, the relation type Clarification exists on an entirely separate discourse level from the two types of Elaboration, as clarification is usually done for interpersonal purposes (Renkema 2009: 66–67; see also Katourgi 2024).

Note that while the supplement in (8) is a quote, it is not projected by anything in the frame—it is simply an explanation of its contents. In other words: despite the difference in order of experience, the two segments relate to the experiential content of one another, which by my definition means expansion. This relation, which I call *expanding citation*, is fairly common, making up 115 out of 280 colon structures with quoted supplements. The other 165 belong to the more typical category *projected citation*, as in (2) above.

Another controversial aspect of (7) and (8) is the fact that both segments are unbound (main) clauses, which calls into question the notion of ‘supplement’—are we not simply dealing with two sentences delimited by a colon rather than a full stop? From a socio-semiotic standpoint, the use of colon rather than e.g. full stop has to be assumed to be meaningful; the clauses are joined into one graphical sentence and clause complex, with one clause semantically supporting the other. For these reasons, I consider structures like these to fall under the umbrella of supplement structures. The same goes for (9), which is the only colon structure ascribed an Extension relation.

- (9) *Den manlige kollegan som jag står och pratar med anlägger plötsligt en förtrolig min: För inte så länge sedan, anförtror han mig, utdelade jag mitt första sexuella slag. [...]* (Retriever n.d. [Expressen 2021])

‘The male colleague I’m talking to suddenly puts on a confidential face: Not too long ago, he confides in me, I slapped someone during sex for the first time. [...]

The two phenomena described seem to happen in sequence: the colleague first changes his expression, and then shares what is on his mind.⁴ This interpretation is supported by the fact that the supplement is not entirely a metaphenomenon, but contains a reporting clause as well, anchoring the relation in the same order of experience as the frame. The entire structure might be rephrased as in (10), making this relation clearer.

- (10) *Den manlige kollegan som jag står och pratar med anlägger plötsligt en förtrolig min: Han anförtror mig ”För inte så länge sedan utdelade jag mitt första sexuella slag. [...]*”

‘The male colleague I’m talking to suddenly puts on a confidential face: He confides in me “Not too long ago, I hit someone during sex for the first time. [...]

Finally, one colon structure has not been assigned any logico-semantic relation. It is given here as (11):

- (11) – *Nej, det är inte så att: ”här, titta i den här”, utan han tar ut det han vill visa.* (Retriever n.d. [Svenska Dagbladet 2021])

“No, it’s not such that: ‘here, browse through this’, but he takes out what he wants to show.”

The structure in question is entirely contained within the first and the third comma. Here, there is no experiential content in the frame, and as such nothing to which the quote can be semantically related (note that *att/that* here is a complementizer, not a pronoun).

In summary, the colon is mainly used for Elaboration and projection, with the latter including not only the typical Ideational projection but also Interpersonal (and intra-textual) comments and labels. Such a metacommunicative use of the colon has been previously described by Karhiaho (2003: 28–29), but to my knowledge not directly addressed in later studies or style guides (but see Katourgi 2024 for an in-depth account).

⁴ One might argue that (9) is an example of Enhancement, where the frame provides the manner of the supplement, but I find that interpretation less likely.

4.2. Dash structures

Table 2 shows the distribution of the five relation types among my 512 dash structures.

Table 2: Relations in dash structures.

Relation type	Σ	%
Elaborating exp.	219	42.8
Enhancing exp.	144	28.1
Extending exp.	126	24.6
Interpersonal proj.	17	3.3
Ideational proj.	2	0.4
<i>no relation</i>	4	0.8
TOTAL	512	100

Notably, the numbers themselves are very similar to those of the colon structures, though the relations are ordered differently: here, projection is fairly rare, while Enhancement and Extension are both very common. Elaboration remains the most common relation type, though unlike in colon structures, attributive Elaboration is much more common than identifying Elaboration in dash structures, at 156 versus 63 occurrences. (12) below is an example of a dash structure with an attributive Elaboration between the segments, and (13) of an identifying one.

- (12) Den oberoende ryska tidningen – en av få som hittills inte fått stämpeln utländsk agent – beskriver hur valfunktionärer utbildas i staden Koroljov utanför Moskva. (Retriever n.d. [Dagens Nyheter 2021])
 ‘The independent Russian newspaper—one of few not yet branded a foreign agent—describes how election officials are educated in the city of Korolyov outside Moscow.’
- (13) *Samtidigt går han in hårt för sin nya hobby – bilracing.* (Retriever n.d. [Aftonbladet 2021])
 ‘Meanwhile, he’s going in hard on his new hobby—auto racing.’

Enhancement is illustrated by (14). Here, the supplement is integrable as an adverbial into the framing clause; it would be possible to simply remove the dash and still have a grammatical and coherent sentence.

- (14) *Polisen ryckte ut till platsen med flera patruller – utan att anträffa någon misstänkt.* (Retriever n.d. [Dagens Nyheter 2021])
 ‘Police turned out to the location with multiple patrols—without encountering a suspect.’

Integrability of the supplement is fairly common in dash structures, with 178 of 512 supplements being integrable, although not all involve Enhancing relations. Enhancement corresponds to typical adjunct adverbials, so this is not surprising, but one may again question whether such a supplement is actually logico-semantically related to the frame, and not simply a circumstance of the process. Again, the use of the dash must be meaningful, and much like how an apposition can enter a logico-semantic relation with a clause, so too can an adjunct when it is graphically (and prosodically) segregated as such. In this case, the dash separates two different assertions, with the latter having undergone ellipsis of redundant elements found earlier in the clause complex (cf. Döring 2015; Ott & de Vries 2016): (14) asserts both 1) that the police turned out, and 2) that they did not encounter a suspect. Without the dash, only the first proposition would be asserted, with the latter being a circumstance therein (the objection *yes, they did!* would be less felicitous with the dash removed).

This could be seen as the main difference between circumstance as an element in the experiential figure and Enhancement as a logico-semantic relation and suggests that punctuation, all things considered, is a very useful tool for text segmentation, as it seems to highlight segments carrying illocutionary force (see also Levinson 1985).

Enhancement relations also occur between free clauses, such as in (15).

- (15) *Men att läsa är förstås inte synonymt med att gå längs en livfull gata – på textens nivå kan vi se allt, vi behöver inte välja mellan natthimlen och gatuljuset.* (Retriever n.d. [Svenska Dagbladet 2021])

‘But reading is, of course, not synonymous to walking along a bustling street—on the level of the text, we can see everything; we don’t have to choose between the night sky and the street lights.’

In fact, a significant number of dashes—125 out of 512—delimit free clauses from each other. This could explain the relatively high occurrence of the (otherwise rare) Extension relations in dash structures. One example is (16).

- (16) *I dag är hennes storebröder vuxna och har fått egna barn – sin lillebror har hon aldrig träffat.* (Retriever n.d. [Aftonbladet 2021])

‘Today, her older brothers are adults and have children of their own—she has never met her younger brother.’

In (17), too, the logico-semantic relation has been labelled as Extension, but the supplement is not a clause.

- (17) *Över hela Ryssland greps över 5 000 personer i en omfattande polisiär – eller närmast militär – operation.* (Retriever n.d. [Aftonbladet 2021])

‘Across all of Russia, over 5,000 people were arrested in a large-scale police—or almost military—operation.’

Note that the supplement in (17) is corrective, which is considered a type of Elaboration in SFG (Halliday & Matthiessen 2014: 612–613). However, since the supplement introduces a new proposition with different truth-conditions (by replacing the previous one), I count it as Extension rather than Elaboration. One might even argue that it is akin to Interpersonal projection, as it involves remarking on the current utterance itself—but, importantly, it does not project. (18) is a more clear-cut example of Interpersonal projection, by way of interpersonal adjunct.

- (18) *Ligan, klubben och – anmärkningsvärt nog – spelarfacket är överens om upplägget.* (Retriever n.d. [Aftonbladet 2021])

‘The league, the club and—remarkably enough—the players’ union agree on the arrangement.’

Even Ideational projection occurs with dashes, although this is very rare. (19) is one of only two cases.

- (19) *Ångestdriven, djupt deprimerad och utan något primärt sexuellt motiv – så beskriver den 31-åring som sedan i slutet av januari sitter häktad, misstänkt för en rad sexualbrott, sig själv.* (Retriever n.d. [Dagens Nyheter 2021])

‘Fuelled by anxiety, severely depressed and without any primarily sexual motive—that is how

the 31-year-old who has been jailed since the end of January, suspected of a series of sex crimes, describes himself.’

Notably, unlike in colon structures, the projecting clause here is in supplement position, although it may also frame, as in (20). Here, the projection is Interpersonal, as the supplement is not quoted from a different time or place:

- (20) *Även om vi firar dagens nyheter, så uppmanar jag alla amerikaner – fortsätt att tvätta era händer, fortsätt att hålla avstånd, och bär munskydd [...]* (Retriever n.d. [Svenska Dagbladet 2021])

‘Though we celebrate today’s news, I urge all Americans—please keep washing your hands, stay socially distanced, and wear masks [...].’

Finally, in four structures, there is no logico-semantic relation across the dash. This is because the supplement is not actually supplementary but a compulsory constituent in the structure: in (21), the dash seems to simply mark a prosodic and rhetoric pause, owing to the fact that the football club IFK Göteborg has been mentioned previously in the text.

- (21) *Rubriken är ”Hur slutar superettan?” och såväl puffen som själva artikeln på SvFF:s sajt är illustrerad med bilder på – IFK Göteborg.* (Retriever n.d. [Svenska Dagbladet 2021])

‘The headline is “How does Superettan end?” and the plug as well as the article on SvFF’s website is illustrated with images of—IFK Göteborg.’

Dash structures commonly occur with any of the three expanding relation types, with Elaboration being the most common and Extension less so, although still much more frequent than projection. Dashes often delimit free clauses from each other but may also separate a free clause from an apposition or an element that could have been an integrated constituent in the clause. In so doing, the segregated element is “raised” to express its own assertion (see also Dawkins 1995: 538–539; Patt 2013: 167, 252). The forms of the segments in dash structures closely correspond to which logico-semantic relations are expressed.

4.3. Parenthesis structures

The quantitative results of my analysis of parenthesis structures are given in Table 3.

Table 3: Relations in parenthesis structures.

Relation type	Σ	%
Elaborating exp.	398	77.7
Extending exp.	41	8.0
Enhancing exp.	41	8.0
Interpersonal proj.	32	6.3
Ideational proj.	—	—
no relation	—	—
TOTAL	512	100

The preference for Elaboration seen in colon and dash structures is even stronger in parenthesis structures, more than three fourths of which have an Elaborating relation between the segments. The remaining relation types are about equally (un)common, with the exception of Ideational projection, which does not occur along parentheses in my data.

232 of 398 Elaborating structures have an attributive relation between the segments of the

parenthesis structure. This often means that the supplement names a characteristic, as in (22), or affiliation, as in (23).

- (22) *De glada (ett tag i alla fall) motionärerna tar samtidigt för sig av såväl pasta som geléhallon, chips, chokladbollar och hembakad morotskaka.* (Retriever n.d. [Aftonbladet 2021])
 ‘The happy (for a while at least) exercisers are helping themselves to pasta as well as raspberry gums, crisps, chocolate balls and homemade carrot cake.’
- (23) *Bakom dem finns också Kristoffer Ajer (Brentford), Sander Berge (Sheffield United) och Jens Petter Hauge (Frankfurt) – spelare som alla är födda runt millennieskiftet.* (Retriever n.d. [Dagens Nyheter 2021])
 ‘Behind them are also Kristoffer Ajer (Brentford), Sander Berge (Sheffield United) and Jens Petter Hauge (Frankfurt)—players who were all born around the turn of the millennium.’

The remaining 166 Elaborating structures have an identifying relation between the segments. Oftentimes, the supplement is an abbreviation, as in (24), or a name used to clarify reference in reported speech, as in (25).

- (24) *Internationella skidförbundet (Fis) klubbade i höstas ett beslut att förbudet ska börja gälla till nästa säsong.* (Retriever n.d. [Expressen 2021])
 ‘This fall, the international ski federation (FIS) decided that the prohibition will come into effect by next season.’
- (25) – *Du får ta det svaret med honom och Janne (Andersson, förbundskaptenen).* (Retriever n.d. [Expressen 2021])
 “‘You can take that answer with him and Janne (Andersson, national team manager).’”

Notably, a large portion of parenthesis supplements are headed by proper nouns: 223 out of 512. With another 72 common nouns, 46 numerals and 2 pronouns, nominal groups make up more than two thirds of all parenthesis supplements, correlating with the many Elaboration relations. Nominal supplements also occur in Enhancement and Extension, though less commonly. The relation between the segments in (26) is Enhancing, and that in (27) is Extending.

- (26) *Hon skriver om sina barn (fast då bara med ömhet) och om föräldrarna.* (Retriever n.d. [Svenska Dagbladet 2021])
 ‘She writes about her children (though only with tenderness) and about her parents.’
- (27) *Icke desto mindre är den kristna traditionen full av fraser om att renas i blod (och det handlar då inte om mens, så kallad månadsrening).* (Retriever n.d. [Dagens Nyheter 2021])
 ‘Nonetheless, the Christian tradition is filled with phrases about blood cleansing (and this does not refer to menstruation, so called monthly cleanse).’

32 parenthesis structures have been analysed as displaying Interpersonal projection between the frame and supplement. These include direct comments on the wording or meaning, like in (28), but also references to external sources, like in (29). The latter is similar to Ideational projection in that it names a Sayer (or Angle), but it lacks a projecting verb (or preposition).

- (28) *De tidigare titlarna är hämtade ur dikter av Rilke och Celan, medan ”Gerontion” (som på ett ungefär betyder ”gamling”) är titeln på en dikt av T.S. Eliot.* (Retriever n.d. [Aftonbladet 2021])

‘The former titles are taken from poems by Rilke and Celan, while “Gerontion” (which approximately means “old man”) is the title of a poem by T.S. Eliot.’

- (29) *”Vi såg det inte komma” förklarade statsminister Stefan Löfven (SVT 17/11–2019) under en intervju för vilken han fick välförtjänt kritik.* (Retriever n.d. [Dagens Nyheter 2021])
 “‘We did not see it coming”, explained prime minister Stefan Löfven (SVT 17 Nov. 2019) during an interview for which he was deservedly criticised.’

Like dash structures, parenthesis structures also have a fair number of integrable supplements, at 90 of 512. However, all of these display some sort of logico-semantic relation to the clause proper. The least “supplementary” of these supplements are the ones that correspond to embedded attributes or qualifiers in, for instance, a nominal group. One example is (30):

- (30) *Men under 1700-talet betraktades autodidakten med misstänksam blick, då han uppfattades som en (religiös) excentriker.* (Retriever n.d. [Dagens Nyheter 2021])
 ‘But during the 1700s, the autodidact was viewed with suspicion, as he was considered a (religious) excentric.’

Unlike in dash structures, these supplements are not compulsory to the frame. They could perhaps be interpreted as corrective, changing the truth-conditions of the structure, which would be enough to grant it the status of a non-integrated (albeit integrable) element.

4.4. Summary

The data in tables 1–3 are combined in table 4 below.

Table 4: Relations in parenthesis structures.

Relation type	:	–	()	Σ	%
Elaborating exp.	220	219	398	837	54.5
Enhancing exp.	29	144	41	214	13.9
Extending exp.	1	126	41	168	10.9
Interpersonal proj.	116	17	32	165	10.7
Ideational proj.	145	2	—	147	9.6
<i>no relation</i>	1	4	—	5	0.3
TOTAL	512	512	512	1,536	100

Comparing the columns, the differences between the punctuation marks are obvious: dashes are more often used to mark Enhancement and Extension, while colons most often mark Ideational as well Interpersonal projection. Parentheses mark Elaboration more often than colon or dash do, though Elaboration is still the single most common type of logico-semantic relation for each punctuation mark, and a total of 55% of all 1,536 structures have a primarily Elaborating relation between their segments.

5. Conclusion

I have presented an analysis of 1,536 sentences with colon, dash or parenthesis from Swedish newspaper text, in order to identify and quantify the correlation between the punctuation mark used and the logico-semantic relation across the mark in question. In these sentences, called *supplement structures*, the first segment is considered a frame to the latter (or medial) supplement. The supplement is typically a phrase or group, while the frame is a free clause, but it is also possible to find structures where both segments are clausal, or where neither is. Either way, my analysis

suggests that most supplement structures can be analysed as clause complexes, regardless of form. For example, a prepositional phrase demarcated by a dash is not simply a hypotactic adjunct but an assertion in its own right, complementing that of the clause from which it is separated.

The typical relation marked by these punctuation marks is Elaboration, occurring in 55% of all supplement structures, and being especially common with parentheses. Enhancement and Extension are less common, occurring in 14% and 11% of the data, respectively, and mainly between segments demarcated by dashes. In this paper, the logico-semantic type projection has been subdivided into Ideational and Interpersonal projection, as the established subdivisions are considered less interesting for a logico-semantic analysis. Projection occurs with all three punctuation marks, but is rare outside of colon structures, of which more than half are projecting. In total, 20% of all supplement structures in my data display a projecting relation between the segments, Ideational and Interpersonal projection being about equally frequent overall, but the former almost exclusively occurring with colons. Only in a few cases is the supplement actually fully integrable as an embedded constituent in the frame, in which case no logico-semantic relation can be identified.

The study shows that using punctuation as grounds for segmenting text for analysis can be a fruitful approach, despite contemporary models for text analysis typically taking a syntactic approach and segmenting texts after free (and occasionally bound) clauses, leaving clause-external supplements and frames as parts thereof. It is evident that punctuation marks strongly correlate with different semantic and pragmatic meanings, possibly even contributing meaning in and of themselves, not unlike lexical conjunction.

The system of logico-semantic relations is comparatively underexplored in SFG, and punctuation is more often than not completely ignored in linguistic studies. It is my hope that this study can inspire future research on these aspects, also in languages and text types other than those explored here.

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