WHAT IS IN THE PARAGRAPHS OF VARIOUS SECTIONS OF RESEARCH ARTICLES?

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Abstract
This paper strives to uncover the leading paragraph build-up patterns in academic writing. It employs the framework pioneered by Mathesius (1942/1982) and Daneš (1994, 1995), and elaborated on by Pípalová (2005, 2008a, 2008b, 2014). The corpus assembled for the study involves three distinct sections of Research Articles, viz. Abstracts, Introductions and Conclusions. The research confirms the general prevalence of Broad P-theme paragraphs, especially the Content Frame categories. It also demonstrates that non-canonical (i.e. transitional and peripheral) forms of paragraph build-up tend to prevail and identifies a number of factors at play. The paper also shows that the distribution of paragraph patterns is not homogeneous and appears to change across the space of the Research Articles.

Keywords
research articles, subgenres, thematic build-up of paragraphs, Narrow P-theme paragraphs, Broad P-theme paragraphs, non-canonical paragraphs

1.1 Introduction
Paragraphs have been explored from diverse perspectives. The aspect central to the present paper is the thematic construction of paragraphs. The specialized corpus upon which this study is conducted was compiled as monodisciplinary, featuring linguistic discourse exclusively, and monogeneric, featuring solely the genre of Research Articles (hereinafter RAs), often considered as the prototype of academic discourse.

1.2 Previous research
Mathesius’s (1942/1982) pioneering work discriminated between three categories of paragraph (viz. paragraphs where the theme is stable, paragraphs where the theme unfolds, and paragraphs where the theme develops). His framework was crucially developed by Daneš (1994, 1995) who, among others, employed in Mathesius’s framework his own theory of thematic progressions (hereinafter TP, e.g. Daneš 1974, 1989). Daneš (1995: 33) holds that:
Thematic coherence is manifested by the fact that each paragraph has, in principle, a theme of its own, which appears as hypertheme in respect to the individual utterance themes that are subordinated to it. The different types of the thematic build-up of paragraphs can be constituted just by taking into consideration different possible relationships between the paragraph theme (P-theme, taken as hypertheme) and the themes of individual utterances (U-themes) of which the paragraph consists.

The resulting framework then features four distinct paragraph categories together with four subtypes as follows: Stable P-theme paragraphs, Unfolded P-theme paragraphs with two subtypes (a/aspects and b/split), Content Frame P-theme paragraphs with two subtypes (a/static and b/dynamic) and Developing P-theme paragraphs.

Daneš’s theory was further elaborated by Pipalová (2005, 2008a, 2008b), who strove to establish the individual paragraph (sub)types on a number of firm criteria. She also deepened the insight into the subtypes of the Unfolded P-theme paragraphs. Crucially, perhaps, she proposed to distinguish between two Paragraph Supratypes (Narrow P-theme paragraphs and Broad P-theme paragraphs), relegating Daneš’s original Unfolded P-theme – aspects subtype of paragraphs to the peripheral zone between the two Supratypes, labelled as Unfolded Aspects/Content Frame (Ua/CF). The outcome is represented in Figure 1. Exemplification of the individual paragraph types and subtypes together with their detailed analysis will be provided in 3.2 below.

<table>
<thead>
<tr>
<th>PARAGRAPH SUPRATYPE</th>
<th>PARAGRAPH TYPE</th>
<th>PARAGRAPH SUBTYPE</th>
</tr>
</thead>
<tbody>
<tr>
<td>NARROW P-THEME</td>
<td>STABLE P-THEME (S)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>UNFOLDED P-THEME (U)</td>
<td>Inclusive</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Focusing</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Split</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Subsuming</td>
</tr>
<tr>
<td>BROAD P-THEME</td>
<td>CONTENT FRAME P-THEME (CF)</td>
<td>Static</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Dynamic</td>
</tr>
<tr>
<td>DEVELOPING P-THEME (D)</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>---UNFOLDED ASPECTS/CONTENT FRAME (UaCF), i.e., PERIPHERAL ZONE---</td>
<td></td>
</tr>
</tbody>
</table>

Figure 1: Pipalová's framework of paragraph typology (2008a)

It will be useful to recall the essential parameters of each of the Paragraph Supratypes. Narrow P-theme paragraphs (Example 1) satisfy the following criteria: Top degree of stability in thematic build-up; Foregrounding a single
discourse subject (DS, i.e. the subject matter discussed); Backgrounding the other layers of Theme; Dominant DS, being launched in the Topic Sentence (TS, usually placed initially), motivates the other thematic functions in a paragraph; cohesive links of identity, equivalence, or inclusion; Paradigmatic thematic progressions (constant theme, derived constant theme, theme derived from the Hypertheme); and a rather homogeneous Thematic layer.

(1) **Affiliative interactional resources.** This term is used in the literature to refer to interactional tools used by participants to create social solidarity and interpersonal closeness. From this perspective, affiliative interactional resources are somewhat similar to relationship-building tools. However, unlike the latter, which may not produce an immediate interactional result – although they may impact relationships in the long run – affiliative interactional resources are employed to reach an immediate affective cooperation between participants by bringing them in a moment of interpersonal closeness and solidarity. In this study, the term is used to refer to pro-social interactional tools deployed by the teacher to create solidarity and togetherness with the students in potentially face-threatening moments of conference interaction. (INT 17, 270)

By contrast, Broad P-theme paragraphs (Example 2) are marked by the following: Instability in thematic build-up; Multi-DS paragraphs; considerable DS turnover; Backgrounding the top layer of Theme; Unity/integrity is also backgrounded (the P-theme could be interpreted as “process”, “situation”, “episode”, and more). Many links in paragraphs are motivated pragmatically (as the respective world knowledge has to be activated); Diverse cohesive links (including parallelism and contiguity); Even syntagmatic thematic progressions (thematization of rheme, derived thematization of rheme, thematic jump, thematization of utterance) may be featured; sometimes, however, there need not be any thematic progressions whatsoever. Hence, the thematic layer of Broad P-theme paragraphs is rather heterogeneous (for more, see Pípalová 2005, 2008a, 2008b).

(2) **A speaker** draws upon their pragmatic knowledge to create pragmatic markers, or tools, called “inference triggers” (Fetzer, 2011:258), which indicate that the speaker intends to create a conversational implicature; these conversational implicatures are used to guide the listener toward the correct inference for an utterance (Grice, 1989). Such pragmatic tools are used by speakers not only to direct listener interpretation, but also to express speaker attitude toward one’s statement. How these pragmatic tools are used is explored in the next section. (INT 20, 297)

Apart from the constructional aspect of paragraphs overviewed above, Pípalová (2008a, 2008b) also deals with the content aspect of Themes, treated as a
layered cognitive phenomenon resembling a pyramid. The narrowest layer at the top of the pyramid features the most conspicuous, foregrounded element(s); the central layer involves a number of mutually interrelated, regularly co-occurring items composing a cognitive structure or frame. The lowest layer, which is the broadest of all and simultaneously marked by rather diffuse boundaries, features all the backgrounded elements rooted in a particular speech event/situation (such as producer, recipient, genre, or location).

Unlike Mathesius’s and Daneš’s pioneering studies, Pípalová (2008a) established her monograph on the corpus scrutiny of authentic data. Her specialized corpus involved a balanced share of fiction, journalism and academic writing. Considering the academic subcorpus, directly relevant to the present research, it ensured equal representation of two main academic branches, namely the soft and hard sciences. The data was drawn from monographs representing a variety of fields. The research revealed a dominant share of Broad P-theme paragraphs, testifying to a remarkable degree of constructional instability. This pattern proved to be a happy choice for expository and argumentative purposes, suitable for multiaspectual treatment of phenomena. Among the Narrow P-theme paragraphs the preferred pattern was the Unfolded scheme. The research also revealed a remarkable proportion of paragraphs from transitional and peripheral zones (over 70% of academic findings), due to the commonly integrated evaluative comments, departures, and more. These non-canonical implementations of paragraph patterns, however, were not studied in sufficient detail. Since the empirical part of Pípalová’s (2008a) monograph focused chiefly on Narrow P-theme paragraphs, Broad P-theme paragraphs were relatively under-researched and hence should attract far more attention. This paper is meant to be a modest contribution to the existing research. Following Pípalová’s (2005, 2008a) research, for example, Dontcheva-Navrátilová (2006) scrutinized paragraphing in resolutions and Obdržálková (2013) explored paragraphing contrastively between Czech and Spanish.

In her unpublished conference paper, Pípalová (2014) reported a cross-disciplinary research of paragraphs in two soft sciences. The corpus was also monogeneric, featuring the shorter academic genre of RAs. The data was drawn from two RA subgenres, namely Abstracts and Conclusions. The results confirmed the general preponderance of the Broad P-theme Supratype in the entire corpus and identified as the dominant paragraph pattern the Content Frame with all the subtypes. While the literary data displayed more homogeneous thematic construction of paragraphs, the build-up of linguistic paragraphs was more varied, with some proportion of the Narrow P-theme paragraphs also attested.
2 Methodology and data

2.1 Methodology

In this study the methodology devised by Pípalová (2005, 2008a, 2008b) will be largely adopted, especially the distinction between the two build-up Supratypes (i.e. Narrow and Broad P-theme ones) based on a range of criteria recalled above and the individual paragraph build-up (sub)types. However, to modify Daneš’s (1995: 33) original “themes of individual utterances (U-themes)” and their role in constructing P-themes (i.e. a type of Hypertheme, see Daneš 1994, 1995, Pípalová 2005, 2008a, 2008b), in the present study the unit of research is set at the Main Clause (hereinafter MC). Hence, this paper seeks to investigate the role of MC themes (hereinafter MCTs) in encoding the Themes of Paragraphs (i.e. P-themes). To be sure, since in this approach the Subordinate Clause was considered a constituent of the MC, the subordinate clause themes were not taken account of unless they formed (part of the) MCTs. In authentic corpus examples, MCTs will be underlined. Further, a spelling distinction will be made between the capitalized Theme, as one of the textual Hyperthemes (e.g. Global Theme, P-theme) and small case theme, as a function of the FSP.

The present research aims to identify the leading tendencies in linguistic paragraph patterns and examine their canonical and non-canonical implementations. The specialized corpus was designed as monodisciplinary (featuring linguistic discourse) and monogeneric (featuring RAs exclusively). The study aims to find out whether such uniform parameters of the corpus will produce relatively homogeneous findings regarding the thematic patterns of paragraphs and whether there will be any differences in paragraph patterns across the three distinct RA subgenres, viz. Abstracts, Introductions and Conclusions.

2.2 Corpus data

This study is part of more extensive research. The data was gathered from two international, peer-reviewed Elsevier linguistic journals (viz. Language & Communication, and Journal of Pragmatics) and featured empirical Research Articles (RAs) exclusively. An attempt was made to select only authors displaying English-sounding names or those affiliated with a university established in an L1 English-speaking country (within the inner circle of the Kachruvian model, see Kachru 1985). The specialized corpus assembled for scrutiny featured three sections (subgenres) of 20 empirical RAs. More specifically, the corpus was constituted by 60 sections of RAs (i.e. 20 Abstracts, 20 Introductions and 20 Conclusions), embracing altogether 413 paragraphs and 54,965 words.
As for the individual subcorpora (RA subgenres), the subcorpus of Abstracts turned out to be the most restricted of all in size. Embracing 23 paragraphs and 3,328 words, it constituted 5.57 per cent of the entire Corpus. On average, the actual Abstracts of RAs featured between one and three paragraphs each, which corresponds to the mean 1.15 paragraphs/Abstract.

Similarly, the subcorpus of Conclusions proved to be rather short, as it composed 14.04 per cent of the entire Corpus, comprising 58 paragraphs and involving 6,785 words. The Conclusions in the individual RAs displayed between one and eight paragraphs each, the corresponding mean being 2.9 paragraphs/Conclusion.

Last of all, the most sizable subcorpus of Introductions forming over four fifths of the entire Corpus, accounted for 80.39 per cent of the data. It had 44,852 words and 332 paragraphs. The individual Introductions ranged between five and 31 paragraphs in length, the average being 16.6 paragraphs/Introduction.

Since in this study the research unit is set at the MC, it is vital to express the length of the individual subcorpora and paragraphs also in these terms. The subcorpus of Abstracts involved 145 MCs and its paragraphs proved to be the longest of all, with the average of 6.3 MCs/paragraph. The subcorpus of Conclusions embraced 274 MCs in total and its paragraphs turned out to be the shortest of all, with the mean at 4.72 MCs/paragraph. Last of all, the subcorpus of Introductions amounted to 1,943 MCs and exhibited paragraphs of average length, the mean being at 5.85 MCs/paragraph. Thus on average, there were approximately five MCTs/Paragraph in the entire Corpus. The parameters of the entire Corpus and subcorpora are summarized below:

<table>
<thead>
<tr>
<th>SECTION</th>
<th>PAR N</th>
<th>PAR %</th>
<th>WORDS N</th>
<th>WORDS %</th>
<th>MC N</th>
<th>MC %</th>
</tr>
</thead>
<tbody>
<tr>
<td>ABS</td>
<td>23</td>
<td>5.57</td>
<td>3,328</td>
<td>6.05</td>
<td>145</td>
<td>6.14</td>
</tr>
<tr>
<td>CON</td>
<td>58</td>
<td>14.04</td>
<td>6,785</td>
<td>12.34</td>
<td>274</td>
<td>11.60</td>
</tr>
<tr>
<td>INT</td>
<td>332</td>
<td>80.39</td>
<td>44,852</td>
<td>81.61</td>
<td>1,943</td>
<td>82.26</td>
</tr>
<tr>
<td>TOTAL</td>
<td>413</td>
<td>100.00</td>
<td>54,965</td>
<td>100.00</td>
<td>2,362</td>
<td>100.00</td>
</tr>
</tbody>
</table>

Table 1: Shares of paragraphs, word counts and number of Main Clauses (MC) in the subcorpora of Abstracts (ABS), Conclusions (CON) and Introductions (INT) and the entire Corpus.

3 Results

In this section, firstly, the quantitative analysis provides the overall orientation, offering the distribution of paragraph types across the entire Corpus as well as in the individual subcorpora. Secondly, the ensuing qualitative research displays examples of both canonical and non-canonical paragraph build-up patterns together with their transparent analysis.
3.1 Quantitative analysis

Tables 2 and 3 below are an overview of the quantitative results yielded in the entire Corpus and in the three subcorpora, together with a schematic view of the same. It should be noted that in the figures canonical and non-canonical specimens of individual paragraph constructional types are combined. From now on, the notation will be employed as follows: S – Stable; U – Unfolded; Ua/CF – Unfolded Aspects/Content Frame, i.e. peripheral zone between Paragraph Supratypes; CFS – Content Frame Static; CFMD – Content Frame Mixed and Dynamic; D – Developing P-theme Paragraphs.

<table>
<thead>
<tr>
<th>P-theme</th>
<th>ABS N</th>
<th>ABS %</th>
<th>CON N</th>
<th>CON%</th>
<th>INT N</th>
<th>INT %</th>
<th>TOTAL N</th>
<th>TOTAL %</th>
</tr>
</thead>
<tbody>
<tr>
<td>S</td>
<td>2</td>
<td>8.70</td>
<td>9</td>
<td>15.51</td>
<td>48</td>
<td>14.45</td>
<td>59</td>
<td>14.29</td>
</tr>
<tr>
<td>U</td>
<td>7</td>
<td>30.43</td>
<td>5</td>
<td>8.62</td>
<td>58</td>
<td>17.48</td>
<td>70</td>
<td>16.95</td>
</tr>
<tr>
<td>Ua/CF</td>
<td>1</td>
<td>4.35</td>
<td>7</td>
<td>12.07</td>
<td>45</td>
<td>13.55</td>
<td>53</td>
<td>12.83</td>
</tr>
<tr>
<td>CFS</td>
<td>6</td>
<td>26.09</td>
<td>7</td>
<td>12.07</td>
<td>79</td>
<td>23.79</td>
<td>106</td>
<td>25.66</td>
</tr>
<tr>
<td>CFMD</td>
<td>3</td>
<td>13.04</td>
<td>13</td>
<td>26.72</td>
<td>62</td>
<td>18.67</td>
<td>78</td>
<td>18.89</td>
</tr>
<tr>
<td>D</td>
<td>4</td>
<td>17.39</td>
<td>3</td>
<td>5.17</td>
<td>40</td>
<td>12.06</td>
<td>47</td>
<td>11.38</td>
</tr>
<tr>
<td>TOTAL</td>
<td>23</td>
<td>100.00</td>
<td>58</td>
<td>100.00</td>
<td>332</td>
<td>100.00</td>
<td>413</td>
<td>100.00</td>
</tr>
</tbody>
</table>

Table 2: Findings regarding the individual paragraph build-up patterns in the subcorpora and the entire Corpus

<table>
<thead>
<tr>
<th>P-theme</th>
<th>Abstracts %</th>
<th>Conclusions %</th>
<th>Introductions %</th>
<th>TOTAL %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Narrow P-theme</td>
<td>39.13</td>
<td>24.13</td>
<td>31.93</td>
<td>31.24</td>
</tr>
<tr>
<td>Ua/CF</td>
<td>4.35</td>
<td>12.07</td>
<td>13.55</td>
<td>12.83</td>
</tr>
<tr>
<td>Broad P-theme</td>
<td>56.52</td>
<td>63.80</td>
<td>54.52</td>
<td>55.93</td>
</tr>
<tr>
<td>TOTAL</td>
<td>100.00</td>
<td>100.00</td>
<td>100.00</td>
<td>100.00</td>
</tr>
</tbody>
</table>

Table 3: Shares of Paragraph Supratypes in the subcorpora and the entire Corpus: Schematic overview in percentages

As follows from Tables 2 and 3, in the entire Corpus the most productive paragraph build-up pattern was the CFS, accounting for 25.66 per cent of all paragraphs, followed by its twinned subtypes, CFMD, constituting 18.89 per cent of the data. Hence the CF build-up type formed almost 45 per cent of all the corpus paragraphs. In addition, CFS paragraphs were the most productive build-up pattern in two subcorpora (Introductions and Conclusions) and the second most prolific pattern in Abstracts. Its twinned subtypes, CFMD, were identified as the second most frequent in Introductions and Conclusions. Conversely, the D pattern proved to be the least prolific, corresponding to 11.38 per cent of the data, preceded in frequency only by the peripheral Ua/CF pattern (12.83%), which
marks the borderline, i.e. the transitional zone between the Narrow P-theme and Broad P-theme paragraphs. Most importantly, the Broad P-theme (55.93%) Supratype convincingly outnumbered the Narrow P-theme counterpart (31.24%).

It will be observed that the overall findings were very similar to the findings gained from the most sizable subcorpus of Introductions. However, the results yielded in the other two shorter subcorpora were found to be very different. While in both these subcorpora Broad P-theme paragraphs also prevailed, the results gained from the Abstracts were more balanced, whereas the results drawn from the Conclusions turned out to be more contrastive. Indeed, the Abstracts displayed a relatively remarkable share of build-up stability (39.13% of Narrow P-theme paragraphs, as against 56.52% of build-up instability), whereas the Conclusions exhibited a striking measure of build-up instability (63.80% of Broad P-theme paragraphs, as against 24.13% of build-up stability).

Moreover, a scale of growing constructional instability can be often traced in the individual build-up patterns of paragraphs, corresponding with linear arrangement of the sections. For example, the U or D patterns proved to be most common in Abstracts, less so in Introductions, and least productive in Conclusions. Conversely, the CF patterns were found to grow in frequency with the linear position of the section in the RA.

As also follows from Tables 2 and 3, the corpus findings suggest a remarkable degree of build-up heterogeneity. Indeed, similar to the cross-disciplinary study (Pípalová 2014), in the present research, all particular paragraph constructional types were attested, both in the entire Corpus and in the individual subcorpora, even if with varied proportions. This corresponds to the diversity of communicative needs, stylistic preferences or presentation strategies deemed suitable to the subject matter in question. Despite this, certain patternings can nevertheless be observed as more conspicuous, presumably embodying inter-individual, genre-specific characteristics.

Regarding the distribution of the individual paragraph constructional patterns across the subcorpora, their shares were relatively balanced in the most extensive subcorpus of Introductions, in harmony with the findings yielded in the entire Corpus, whereas disbalanced in one way or another in the shorter subcorpora. Indeed, in the Abstracts, the U pattern peaked and outnumbered any other paragraph category, which was unique in the entire Corpus. In addition, the D pattern, otherwise rather rare, achieved surprisingly high representation, ranking as the third most usual build-up strategy in the subgenre. In contrast, in Conclusions, both the U and D patterns proved to be rare. Even though the subgenre generally exhibited a striking measure of build-up instability, primarily since all the CF subtypes flourished there, this tendency was complemented by
the fairly remarkable proportion of S paragraphs, the preferred choice among the Narrow P-theme specimens in the subgenre. This appears to follow from the emphasis put on deictic encodings of MCTs by the end of the RAs. Thus the findings point to distinct communicative needs profiling the individual subgenres.

### 3.2 Qualitative analysis

#### Narrow P-theme paragraphs

**Stable P-theme paragraphs**

(3) *Research triangulation* is increasingly frequently cited as a guarantor of validity and reliability (Marchi and Taylor, 2009, p.1). It regards the implementation of two or more approaches as a means of checking results (Cicourel, 1969) and it can include various datasets, methods, theories or investigators (Denzin, 1970). (INT 10, 149)

In (3), the P-theme (“Research triangulation”) is introduced explicitly in the TS where it takes the thematic function at MC level and is merely iterated, both intersententially and intrasententially. The TP corresponds to constant theme. In such paragraphs, it is only the top layer of the Theme content pyramid that is foregrounded. The reader’s processing is safely guided by linguistic means (e.g. by pronominalization), which poses relatively low demands on their activation of shared world knowledge. Empirical data shows that in academic discourse such paragraphs are mostly of limited length.

**Unfolded P-theme paragraphs**

(4) *Positioning* is the discursive process of negotiating the interlocutors’ position in discursive interactions (van Langenhove and Harré, 1998:14-15). It was initially proposed in constructionist approaches as an alternative to the more rigid concept of social roles. *Stancetaking* implies some assessment of the interaction and _supposes the mutual connection of that assessment and the interlocutors’ positions* (Jaffe, 2009: 5). Specifically, *positioning stancetaking* means the position taken by someone with respect to the interlocutor, the utterances, or the ongoing interaction (Jaffe, 2009:3-4). Thus, *positioning stancetaking* acknowledges the interlocutors’ agency to assess the interaction, take positions accordingly, and negotiate these positions. (INT 12, 187)

(Note: The underscore character here and in other examples below indicates MCT ellipsis.)

Example (4) epitomizes the subsuming category of the U paragraphs. The last two MCTs (“positioning stancetaking”) embrace/subsume the two earlier counterparts (“positioning” and “stancetaking”). The TPs are paradigmatic,
i.e. constant theme and theme derived from the Hypertheme. The reader’s perception of coherence is significantly enhanced by the TPs and the cohesive devices employed (including lexical repetition). The P-theme is identified explicitly only in the final sentence. Compared to the S pattern, the U paragraphs proved to be longer and more elaborated.

**Periphery**

Unfolded aspects/Content Frame P-theme paragraphs (Ua/CF)

Example (5) illustrates the peripheral zone between the Narrow and Broad P-theme Supratypes, embodied by Ua/CF paragraphs.

(5) *Communicative function of language* refers to interpersonal liaison, relational language use, and information exchange (Hua, 2014; Scollon, 1995). It is also strongly associated with forming and sustaining relationships with other members of the community, which highlights the social character of language use for communicative purposes. *Communicative function of language* is strongly attached to contexts of language use, as well as group membership and identity manifestation (Cashman, 2005; Edwards, 2013, 2009, 1985; Gumperz, 1982 a, b; Wei, 2007). Language choice for communicative function was found to be linked to the character and dynamics of the speaker’s social networks (Wei, 1994), as well as language dominance (Dewaele, 2013b). Numerous studies revealed that multilingual speakers typically have linguistic preferences to communicate particular types of content, for example when expressing positive and negative emotions, or when communicating with certain groups of interlocutors (Dewaele, 2011, 2008, 2006a, 2004a). (INT 8, 123)

In (5), we can observe that the build-up pattern is gradually gaining momentum, as the onset is marked by exemplary stability (constant theme), then the Theme is further unfolded (suggested by the derived constant theme) until the reader notices a shift in the topic when they arrive at “numerous studies”. At this point in the paragraph, they are asked to work out that these studies do not denote academic studies in general but only those studies dealing with the “communicative function of language”, although such particularization is taken for granted and is expected to follow conventionally from the mere fact that such studies are dealt with in the space of the paragraph initially centered on such a Theme. Since the concept of the “communicative function of language” is already perfectly activated, such explicit particularization would be deemed redundant. In addition, the attributes commonly take rhematic functions in noun phrases (e.g. Dušková 2015), which would not fit in with the earlier co-text. It should be noted that the element ellipted is syntactically dispensable. Hence the
DS “communicative function of language”, epitomizing the top and narrowest layer of the Theme content pyramid is now set in a relevant cognitive frame (as an element of the central layer of the Theme content pyramid), for the DS is no longer discussed only internally, in terms of its inherent features/constituents (per se), but approached also externally, adherently, i.e. from the standpoint of the pertinent literature or studies dealing with the issue (rather than the issue itself). As can be observed, the first portion of the paragraph follows the Narrow P-theme pattern, while the final part clearly exceeds its bounds, pointing to the Broad P-theme pattern. Cases of this kind are deemed to occupy the space between the two Supratypes, viz. Narrow and Broad P-theme ones. To reformulate, although there is only a single foregrounded DS, other DSs associatively related to the foregrounded DS and pertinent to it are treated as well (in diverse proportions, as the case may be).

**Broad P-theme paragraphs**

Content Frame P-theme paragraphs: Static

(6) **Chat-based programming** is a genre of broadcast talk found in television and radio as a form of talk (Ames, 2016a; Tolson, 1991). **Features of chat-based programming** are that it is conversation-based and orients towards personal topics; displays of wit and humour accompany a shift to personal talk; and the potential for transgression is always present (Tolson, 1991). **Despite its appearance as ‘normal’ conversation, talk in this context is strictly institutional. Noting that all talk is inherently performative (Edwards and Potter, 2001), radio talk is particularly constructed as talk for an overhearing audience (Hutchby, 2006; Pandora, 1998; Scannell, 1996; Sternstedt, 2014). Radio hosts manage the co-presence of the audience and themselves within a virtual and imagined ‘place’, and facilitate (and foster) a sense of community (see Ytreberg, 2004). Hosts therefore provide a mediated interface between radio as a public medium and the sometimes public/sometimes private world of the listener, and this has been well-considered as a general concept in study into radio talk (Brand and Scannell, 1991; Harris and Scannell, 1991; Hutchby, 1991; Scannell, 1996). (INT 5, 12)

Example (6) features several DSs and the reader is expected to be familiar with the relevant subject matter pragmatically to be able to recall the pertinent cognitive frame and to make sense of the relationships properly. The decisive proportion of MCTs are arranged paradigmatically, except for the last one, which is syntagmatic. This points to a non-canonical instantiation of the pattern, so commonplace in academic discourse. The TPs used are more varied, including the constant theme, the derived constant theme, the theme derived from the Hypertheme and a single instance of thematization of the utterance. Cases like
(6) call for the recipient’s familiarity with the issue and their activation of the respective world knowledge cognitive frame, for the linguistic aids facilitating its coherent perception are much less overt.

Content Frame P-theme paragraphs: Dynamic

(7) Here, rather than using ‘saw’ or a similar standard perceptual verb, the person who reports the error uses ‘on examination’ to frame the perceptual element of the incident. The use of ‘on examination’ and ‘on inspection’ as perceptual verbs is likely to be specific to the medical context. This highlights the need to consider clinical incident reporting as a specific genre for this type of pragmatic analysis. (INT 4, 50)

In (7), several DSs are discussed, and the reader is asked to shift attention gradually. However, in doing so they are guided rather firmly, step-by-step from one MCT to another, using the thematization of rheme TP. Generally speaking, this pattern may satisfy the needs of inferencing, argumentation or explanation very naturally. The explicit formulation of the P-theme would be challenging, as the P-theme has to be worked out and presumably the formulation arrived at cannot but be rather vague.

Developing P-theme paragraphs

(8) Popular music performance is often subject to stylization, where the artist uses non-native features in their performed speech. This may be clearly seen in globalized, transnational genres, as in the case of a Japanese rap group using stylized English in their lyrics (Pennycook, 2003). Such language use is what Berger (2003) considers to be ‘participation-through-doing’, by which language choice may embody a social identity to a greater degree than mere description. While stylized use of another language is perhaps more obvious, it is worth observing that stylization in music may also occur in the adoption of non-native dialect features. In this paper, I consider an Anglophone case of transnational dialect contact, in which the artist adopts features of a stigmatized, non-native dialect. I focus on the use of Southern American English features in country music as performed by Keith Urban, a native Australian and speaker of Australian English. Born in Whangarei, New Zealand, Urban was raised in Caboolture, Queensland, and is a prominent country artist. He released his debut album in Australia before moving to Nashville, Tennessee, in the 1990s to pursue a music career in the United States. Since then, he has released eight albums that have achieved a high degree of popular and critical success in the US, Canada, and Australia. (INT 7, 95)
In (8), the author first follows the CFD pattern to discuss stylized music performances. Then attention is shifted to the producer’s paper and still later to the subject of scrutiny in the narrow sense, viz. Keith Urban. The latter two paragraph constituents employ the S pattern in their PH-themes. It should be stressed that numerous D paragraphs (in their non-canonical D+ implementation) abruptly shift attention from an experiential topic to topics textually or situationally (deictically) available.

4 Discussion: Conspicuous tendencies in paragraph build-up

As has been mentioned above, in academic discourse the actual paragraph construction need not be always exemplary and satisfy all the parameters fully. Indeed, there are many features pointing in the opposite direction, at least in the humanities such as linguistics. For the sake of clarity, the following part is organized in sections, although there is a considerable overlap between the phenomena in the authentic data explored.

4.1 Compositionality

Firstly, lengthy academic paragraphs are prone to display several constituents within their own build-up strategy the PH-themes of which may, but need not, agree in their build-up fashion with the entire paragraph. However, mainly for manageability reasons, in the quantitative analysis of this study, only the overall paragraph build-up pattern was taken account of and represented, disregarding such potential inner constituents.

For exemplification, the reader is referred to the specimen of the D pattern (see Example (8) above) which illustrates longer academic paragraphs. It seems that its author intentionally correlated more notions within its space and decided to shift attention between them primarily at two turning points. Hence the overall pattern was identified as a D paragraph. Initially, the author looks at “Popular music performance”. They elaborate on it employing the CFD scheme, presumably since the topic was deemed rather abstract and demanding. Then attention is shifted to a topic which is in fact always activated, being deictic in nature, namely “this paper”, or else “the present author’s intention”, using the S pattern, although in an unorthodox implementation (see also below). Last of all, attention is turned to the topic of “Keith Urban”, thematized from the immediately preceding rheme. To deal with this topic, the author employs a rather prototypical S strategy. In order to depict the build-up of such paragraphs using clearly distinguishable constituents, the following coding is tentatively proposed: D [CF Dyn][S][S]. As Example (6) demonstrates, the patterns pursued in the constituents need not agree with the build-up pattern of the entire paragraph.
4.2 Non-canonical realizations of patterns: Transitional and peripheral zones in paragraph build-up

Furthermore, in academic discourse, the paragraph constructional patterns are often realized in non-canonical ways, incorporating diverse argumentative or explanatory insertions, asides, bracketed passages and more. Presumably, this finding reflects the complexity of communicative needs and the numerous challenges authors have to meet. Indeed, written academic discourse being monological, authors have to engage with their readers and negotiate meaning with them carefully in order to communicate their point well. They should also anticipate potential difficulties for the reader and help them wherever necessary. The truth or knowledge has to be represented as accurately, explicitly and comprehensively as possible, which calls for a pronounced degree of formulation complexity. Simplification or schematization would be considered unacceptable sins. There is also the requirement to establish adequate intertextuality links and to avoid plagiarism. Last but not least, not only is the author expected to communicate relevant meanings, but they have to do so clearly, efficiently and persuasively. Hence, for example, reference to diverse other studies to enhance the argumentative line often further complicates the build-up of the discourse. In order to cope with numerous demands and yet to ensure adequate clarity and persuasiveness, the author has to hierarchize their content delicately, and insert a variety of secondary passages, which frequently take the shape of minor support sentences in traditional books on rhetoric or style. Commonly, such sentences do not fit in with idealized patterns and naturally modify or even disrupt them. Empirical research has found that non-canonical paragraphs (i.e. a cline ranging from the transitional to the peripheral ones) often tend to be longer, presumably to accommodate these varied layers of meanings.

(9) Refusals can be conceptualized from a speech act perspective as commissives (Austin, 1962; Searle, 1976), committing the speaker to a course of action. In Brown and Levinson’s (1987) terms, they are face-threatening acts as they highlight speakers’ and hearers’ different wants and needs and thereby potentially disturb social harmony. This leads to a high likelihood of mitigation through negative and positive politeness strategies. (INT 1, 2)

In the above short example, the P-theme (“Refusals”) is explicitly stated initially in the TS (where it takes the MCT function), and later reiterated. However, the last sentence, displaying a syntagmatic link, thematizes the preceding utterance (epitomizing also discourse deixis), in order to suggest inferencing, deduction, implication, or to convey an argument in an appropriate
way. Hence in this case, various quantitative and position cues point to the S paragraph, though realized non-canonically, the suggested notation being S+. It should be remarked that alternative formulation (They are likely mitigated…) would keep the link implicit. Empirical research has found that non-canonical paragraphs often tend to be longer, presumably to accommodate various layers of meaning.

4.3 Coherence ellipsis

Further, RAs rank among the academic genres which are clearly constrained by space. In order to satisfy the need for formulation economy, the authors tend to employ ‘coherence ellipsis’ due to which some cases virtually resemble syntactic branching. However, some of these instances may even give rise to ambiguities. Moreover, at times they may be the product of deliberate strategic vagueness, as it need not be always apparent where to posit coherence ellipsis and where it no longer applies.

(10) In a study comparing learners at three proficiency levels of L2 Modern Greek and an NS group, Bella (2014) employed three role plays varying power difference and social distance. She analyzed learner production for linguistic strategies and also collected retrospective interview data. Similarly to Taguchi (2013), Bella (2014) found that learners used far more direct strategies than native speakers, though this tendency declined with increasing proficiency. Conversely, learners used fewer indirect strategies and fewer adjuncts, though both generally increased with greater proficiency. Overall, however, patterns of strategy use were markedly different even between the highest-proficiency learner group and native speakers. (INT 1, 6)

Example (10) might be done more justice by presupposing intentional coherence ellipsis as a device condensing the discourse, and eliminating the unnecessary iteration of elements. To be sure, such type of ellipsis is not marked by syntactic deficiency/incompleteness. Rather, by appealing to the continuity of senses, the producer invokes the implied underlying element/s ensuring a coherent perception of the discourse. Hence, despite such coherence ellipsis, the reader is expected to work out the relationships unambiguously. Not only are there useful cohesive signposts taking the shape of connectives (conversely, overall, however), but the author also uses parallelism to reinforce the links. Hence Bella (2014) found that learners used far more … appears clearly related to Bella (2014) found that learners used fewer…, although the second underlined part is only implicit. Even though the last sentence is likely meant in the same way, it may be considered an instance of strategic vagueness. At least theoretically, it may
suggest the deduction/inferencing of the author of the RA, and not necessarily the original author’s claim (i.e. Bella). Anyway, the example demonstrates language/formulation economy which is mirrored in the heterogeneity at thematic level. The acknowledgement of two coherence ellipses makes it possible to interpret the paragraph as a product of compositionality, where the S pattern (though implied) in the second half of the paragraph incorporates a CF constituent (at a lower level), the notation corresponding to: S+[CFS].

4.4 Deixis

Occasionally, rather than the subject matter in question, the author decides to thematize various deictic elements at hand – primarily diverse aspects of discourse deixis. In (11) below, the MCT functions encode passages of the unfolding text/discourse, epitomizing discourse deixis.

(11) The paper is organized as follows. Section 2 reviews what we know so far regarding musical code-switching, and establishes a baseline for the analysis of both the formal and pragmatic features of lyrical mixing. It also presents the background that situates the Texas Tornados within their socio-historical and cultural context. Section 3 presents the methodology employed, including data sources, data extraction and tabulation, and the categories of formal and functional classification of language mixing. Section 4 presents the quantitative and qualitative results, which are then discussed and interpreted in Section 5 in comparison and contrast with the types of code mixing found in other bilingual singer-songwriters of the United States. Section 6 concludes the paper and suggests avenues for future research. (INT 15, 221)

4.5 Metadiscourse

There are other reasons for non-canonical implementations of the paragraph build-up patterns in academic discourse, including the existence of metadiscourse, both textual and interpersonal (Hyland 2017), which often enhances the persuasive impact of discourse but disrupts the thematic progressions, and shifts attention away from experiential to textual and interpersonal meanings. Example (12) illustrates a peripheral implementation of the CFD pattern. Not only does the author appeal to the reader (Note...) but they also invoke their own presence (Under my approach...). Furthermore, the author inserts an explanatory remark (This means...) and makes use of an abstract rhetor (i.e. typically an inanimate item as quasi-agent it is necessary, see Hyland, e.g. 2000: 85-103). Last but not least, the author also thematizes various other approaches/voices (this view of commodification).
What is in the Paragraphs of Various Sections of Research Articles?

Different genres are performed differently, and the value of a performance is rooted in the genre it is based in (Coupland, 2011). This means that the authenticity of a performance is likewise rooted in genre. Due to the need for authenticity, it is commodified (Johnstone, 2009). If the audience prefers an authentic performance, it is necessary for the artist to achieve authenticity in order to be commercially viable. Authenticity as commodity resembles, but crucially differs from, the position taken by Cutler (1999, 2002) that authenticity for white American hip-hoppers is constructed through commodified lifestyle choices. Under my approach, the lifestyle choices mark one as having the commodified authenticity. Note, however, that from both perspectives, style, commodification, and authenticity are closely linked. While there may well be an economic effect, this view of commodification is taken to mean the reification of a social process, rather than the more literal approach to merchandise like T-shirts and dialect dictionaries seen in Johnstone (2009) and Beal (2009b). (INT 7, 108)

It will be observed that many non-canonical academic paragraphs exhibit a considerable measure of MCT diversity. Indeed, paragraph MCTs were marked by pronounced heterogeneity, denoting various experiential, but also interpersonal and textual meanings (Halliday & Hasan 1985). They encoded the broader features of the communicative event (author, recipient, the RA, its sections, other particular passages of the RA, such as the examples in the co-text: in other words, much had to do with deixis). Moreover, they denoted various other relevant authors or studies taken into account. This way they ensured proper referencing, both intra-textually and intertextually. Naturally, there were also abstract rhetors, various processes, cases of inferencing and more.

Such thematic heterogeneity at MCT level frequently precludes a smooth flow of TPs, allowing for many breaks or discontinuities in the TPs and occasionally resulting even in the temporary absence of TPs. These tendencies point to a relatively less significant role of TPs in the build-up of academic paragraphs. Hence it is not always that the TPs can guide the recipient safely through the discourse and enhance a coherent perception of the passage.

4.6 Vagueness or indeterminacy

Vagueness may be employed even as a build-up strategy in its own right, being widespread chiefly in CFS paragraphs. After all, in this paragraph category the author may decide not to employ any TP at all (see Daneš 1995). In other cases, positing the TPs would be rather nonsensical.

This seems to point to a virtual cline existing within CFS paragraphs. On the one extreme, there are instances grounded on a web of conventionally associated, mostly experiential elements where in order to ensure adequate coherent perception, one has to activate the pertinent world knowledge (cognitive frames/
schemata) more or less well-established in the community of practice and recognized in the relevant cultural, institutional and/or disciplinary contexts. On the other extreme, there are instances where no TP is plausible, the coherence being very loose, vague, perhaps deliberately, with the P-theme being hard to formulate, as the MCTs themselves represent deictic entities or abstract rhetors. In between there is a whole continuum of other instances, together with mere enumeration of categories or specimens, and naturally, all the above features may be also combined in diverse proportions. Obviously, this constructional pattern exhibits a considerable measure of build-up instability at MCT level, i.e. heterogeneity of themes, which relativizes the role of TPs and the very need for them.

(13) It would also be of interest to compare and contrast the songs and their switches against audience reactions, either in authentic or experimental settings. In that regard, it would be especially valuable to test whether different types of hearers interpret these songs differently depending on their own background, as argued before by Picone (2002) and Johnstone (2011). (CON 14, 389)

In (13), the connectivity between the two sentences seems to be suggested by the parallelism of the sentence onsets. Presumably taking this for an implementation of the constant theme TP would be very odd. Moreover, rather than adopting such outer marking of coherence by TPs, inner coherence appears more justifiable, and due to that identifying the P-theme explicitly would be challenging.

However, strategic vagueness may also show especially in very long CF paragraphs. The sentences appear related so loosely that the technique resembles at times mere juxtaposition, and at times mere idiosyncratic associative wandering and it is up to the reader to ponder their unity, make sense of their mutual relation, and work out the overall P-theme. Example (14) should illustrate such instances:

(14) Communicative function of language revolves around information exchange, self-expression, as well as establishing, maintaining and strengthening social relationships with other people (Scollon, 1995). In the era of international mobility and cultural transition, countless bilinguals find themselves in a position where the L2 replaces the L1 in the majority of professional, social, and communicative areas of life (Dewaele, 2015a; Hoffman, 1989). Changes from L1- to L2-speaking contexts cause a significant shift in language use for interactive purposes. Levels of L2 attainment, language dominance, as well as participants and context of interaction, are typically seen as core coordinates in communicative language use (Milroy, 1987; Wei, 1994). Wei points out that
'language is a social notion; it cannot be defined without reference to its speakers and the context of its use' (Wei, 2007, p. 12). Research on language preferences show that bilinguals tend to have their favourite language for particular purposes (Dewaele, 2011; Grosjean, 2010). The overall realm of experience can be divided into different domains of life for which bilinguals may use different languages (Schrauf, 2002). According to Grosjean (2016) language use in bilinguals is said to be domain-specific, and some domains might attract higher levels of L2 than others. The mosaic of linguistic complementarity will depend on the individual history and language preferences of the speaker (Dewaele, 2010; Grosjean, 2010). (INT 9, 127)

4.7 Combination of factors

What is more, the non-canonical implementations of the paragraph build-up pattern may follow from a combination of several features. In (15), compositionality and various types of deixis (discourse, person and temporal) delicately combine and work in concert. After the initial Topic Sentence, there is a paragraph constituent pursuing peripheral S PH-theme, invoking the author of the paper, centered on person deixis and parallelism upon which (rather than on the thematic progressions alone) the contiguity is established (I discuss, I then present, I also analyze). This constituent is followed by the final one established on discourse deixis (the analysis, the conclusion), pointing to a peripheral U split pattern. The entire build-up has been treated as non-canonical CFS specimen (CFS+).

(15) The remainder of the paper is structured as follows. In the literature review I discuss various approaches to narrative, voicing and identity, followed by a discussion of my methods, some background information on the two organizations, and a description of the immediate context of their gathering. I then present analysis of four narratives from participants, demonstrating how these narratives highlight three stereotypic Christian types. I also analyze how these narratives function, with varying degrees of indirectness, at the multiple scales described above, and how they are taken up by other participants in moments of shared disalignment to collectively (re)imagine an alternative Christianity. The analysis is followed by a discussion of the implications of this alternative Christianity for LGB inclusion, and the conclusion expounds upon the theoretical contributions of this work. (INT 3, 20)

4.8 Length

Regarding the length of the paragraphs, the research performed revealed some noticeable tendencies. Firstly, the Narrow P-theme paragraphs proved to be considerably shorter than the Broad P-theme ones. Indeed, the mean number of MCTs was found to vary, with 4.71 MCTs in Narrow P-theme paragraphs,
5.75 MCTs in the peripheral Ua/CF and 6.31 MCTs in Broad P-theme paragraphs, with the mean for the entire Corpus set at 5.86 MCTs/paragraph. In the data the generally shortest proved to be S paragraphs, while the most sizable proved to be D paragraphs.

What is more, the research also convincingly demonstrated that non-canonical (i.e. peripheral and transitional) realizations of the individual paragraph build-up patterns generally prolonged paragraph length. To illustrate, canonical S paragraphs involved on average 1.68 MCTs, while the non-canonical cases did 4 MCTs. The same holds for the comparison between the canonical Ua/CF pattern (5.47 MCTs) and the non-canonical realizations (7.57 MCTs). Similarly, the D pattern in its typical instantiations embraced 6.71 MCTs on average, while in non-central specimens this was 8.93 MCTs. Hence even the paragraph length (expressed in the number of MCTs) appears very telling.

5 Conclusion

The present research demonstrated a relatively high degree of instability in paragraph build-up in the entire Corpus, as the Broad P-theme paragraphs convincingly outnumbered their Narrow P-theme counterparts, with the transitional zone between them constituting the margin. What is more, the Broad P-theme pattern dominated in all three subcorpora.

On closer examination, the relatively lowest measure of constructional instability was attested in the Abstracts, while the highest measure of instability was traced in the Conclusions. This finding presumably points to a scale of rising constructional instability which increases with linearity (i.e. linear arrangement of sections). If this trajectory is confirmed using more extensive data, each subgenre would have a different thematic potential for the build-up of their paragraphs.

Within Broad P-theme paragraphs, the CF types clearly prevailed and outnumbered the D scheme. Indeed, the most productive proved to be all the CF categories, primarily the Static subtype, with all put together constituting a lesser half of the data (approximately 45%). Within Narrow P-theme paragraphs, the U pattern was clearly preferred to the S scheme in the entire Corpus as well as in two of the subgenres (viz. Abstracts and Introductions). This result seems to follow from the prevalence of experiential MCTs in the U paragraphs.

Although in the entire Corpus Narrow P-theme paragraphs were found to be fairly scarce, their incidence was to a larger extent associated with the deictic encodings of MCTs. These include primarily person deixis (pointing to the author or addressing the recipient) and discourse deixis (mostly identifying various portions of the unfolded discourse). Naturally, the deictic encodings make the formation of TPs rather redundant.
Conversely, it was the Broad P-theme paragraphs which could accommodate the necessary complexity of communicative needs. Moreover, this build-up pattern proved to be the chief carrier of the experiential MCTs and in the data investigated it epitomized the prototype. Although Broad P-theme paragraphs seem rather demanding to decode, particularly for novices, they are nevertheless very cooperative. Indeed, they satisfy the need for language economy, foregrounding only elements worthy of explicit encoding as themes, allowing the author to contextualize and interrelate the data thoroughly, invoking chiefly global cohesion.

Considering the proportions of the individual paragraph types in the subgenres, the subcorpus of Introductions saw the most balanced results, for none of the paragraph patterns peaked there. The two shorter subcorpora, however, proved to be very contrastive. Whereas in the Abstracts it was primarily the U and less conspicuously the D pattern that proved prolific, in the Conclusions it was the S and especially the CF types that were found productive. The former tendency appears motivated by the inherent need to shift focus in the Abstracts, whereas in the Conclusions the finding may stem from the emphasis put on integrating the content of the particular research.

The findings presumably point to distinct communicative needs profiling the individual subgenres. The Abstracts aim to anticipate the study, draw attention to it and familiarize the reader in a condensed way with its diverse aspects; the Introductions establish common ground with the reader and focus on one issue at a time, defining, classifying, explaining or overviewing in a step-by-step fashion; and the Conclusions summarize, integrate and contextualize the findings arrived at, interpreting them thoroughly and giving a properly succinct statement of what the entire study has brought to light.

Furthermore, the qualitative analysis performed revealed a number of additional tendencies, such as a considerable share of non-canonical implementations of the paragraph build-up patterns or the subtle inner hierarchy and compositionality in order to ensure a transparent internal structure of paragraphs and to maintain their thematic coherence. The study also showed a relatively lesser role played by TPs, among others due to a considerable heterogeneity of MCTs, a remarkable rate of deixis and metadiscourse employed in academic discourse, or due to the posited coherence ellipsis, disrupting many TPs and frequently resulting in strategic vagueness. It seems that only such build-up complexity and hierarchy can comfortably accommodate the wide range of communicative functions academic discourse has to satisfy, which all prolong the paragraph length.

Regarding the tendencies in metadiscourse and deictic encodings of MCTs, the research showed that whereas Abstracts and Conclusions were dominated
by intratextuality, primarily person and discourse deixis, Introductions were marked especially by intertextuality, highlighting relevant authors, sources of information, quotes, various relevant studies, the pioneers in the research, and the like.

Furthermore, although in academic discourse paragraph length is generally considerable, it was found to vary in a significant way. Indeed, the Narrow P-theme paragraphs proved to be shorter compared to the Broad P-theme ones. What is more, the canonical realizations of all the paragraph constructional types turned out to be shorter on the whole compared to the non-canonical ones, presumably because the latter tended to meet a wide range of communicative functions, suggesting dialogicality with the recipient (such as a number of asides, explanatory comments, notes and more).

The diminished role of TPs in the thematic build-up of paragraphs may be clearly manifested by the striking share of CFS paragraphs (which themselves need not display any TPs at all, see Daneš 1995), but also by a prominent proportion of various non-canonical implementations of the patterns and the subtle inner hierarchy (compositionality) in paragraphs with several PH-themes. Further, it also shows in the thematic build-up of a paragraph displaying solely/predominantly deictic MCTs. Presumably, in such instances, the role of TPs is peripheral and the connectivity or inner contiguity of paragraphs rests on other grounds and therefore may receive even other interpretations.

Since TPs are mostly employed to facilitate coherence, attenuating their function in academic discourse must have some justifications. To name but a few, in some cases it may be suggestive of the author’s endeavor to meet the demands of strategic vagueness. This is particularly common in passages where there are abstract rhetors, for example, encoding several succeeding MCTs. In other cases, by attenuating the impact of the TPs, the authors create space for negotiating the meaning of a challenging topic with the reader and to persuade them, which frequently calls for employing relevant metadiscourse, whether textual or interpersonal (Hyland 2000). Whatever the particular reason for backgrounding the role of the TPs, it goes without explicitly mentioning that the lower impact of TPs must be compensated for by an appeal to activate the pool of shared knowledge. Acknowledging some overlap between the metadiscourse and deixis, this study cannot but corroborate the findings regarding the impact of metadiscourse on the formulation complexity of academic discourse (e.g. Hyland 2017, Pípalová 2019).

To sum up, the results achieved in this study are relatively consistent with earlier research in being very heterogeneous. To elaborate, the tendencies identified for linguistics data in Pípalová (2014) were all corroborated, viz. prevalence of Broad
P-theme Supratype, and the CF pattern in particular, with some Narrow P-theme Supratype also traced. Moreover, non-canonical realizations of paragraph patterns were dominant. Although these general tendencies characterize the entire Corpus as well as the individual subgenres, a striking development in paragraph patterns across the RA subgenres was observed. Hence each of the subgenres appeared to have a distinct thematic potential for paragraph build-up.

Secondly, the study conducted found a remarkable degree of heterogeneity also at the level of paragraph pattern realizations, for non-canonical paragraph types (of diverse degrees, ranging from the transitional to the peripheral zone) convincingly outnumbered the canonical implementations. The study identified some of the main factors impacting the prevalence of non-canonical realizations of paragraph patterns, including compositionality, complexity of communicative needs, diminished role of TPs, coherence ellipsis, deixis, metadiscourse, looseness/vagueness, indeterminacy, and possibly length, acknowledging their potential hierarchies, overlaps and mutual interplay. Admittedly, the corpus analyzed was limited and thus more research is needed to enhance our understanding of the subject matter scrutinized.

**Notation**

PAR – Paragraph
ABS – Abstract
CON – Conclusion
DS – Discourse Subject
INT – Introduction
MC – Main Clause
MCT – Main Clause theme (FSP)
P-theme – Paragraph Theme, a type of Hypertheme
PH-theme – Paragraph Hypotheme (constituent Theme)
RA – Research Article
TP – thematic progression
TS – Topic Sentence
S – Stable P-theme paragraph
U – Unfolded P-theme paragraph
Ua/CF – Unfolded Aspects/Content Frame paragraph
CFS – Content Frame Static P-theme paragraph
CFMD – Content Frame Mixed and Dynamic P-theme paragraph
D – Developing P-theme paragraph

**References**

Daneš, F. (1994) ‘Odstavec jako centrální jednotka tematicko-kompoziční výstavby textu (na materiále textů výkladových)’. [Paragraph as a central unit of the thematic and compositional build-up of the text (On the material of expository texts)]. *Slovo a slovesnost* 55, 1-17.


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