

# Let Me Finish!—Speech Patterns of Interruptions in Chinese: A Corpus-based Study on Parliamentary Interpellations on Taiwan

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## Abstract

This corpus-based study investigated verbal interruptions during parliamentary interpellations based on official and publicly accessible transcriptions provided by the Legislative Yuan of the Republic of China (Taiwan). While interruptions have previously been understood as organizing turn-taking, as well as cues and speech markers, the results of this study suggest that interruptions have a dual nature. Interruption is incentivised by confrontational discourse strategies and realized by linguistic expressions, some of which are statistically significant and can be called keywords. Using open-source data to explore the linguistic features in the speech patterns of interruptions in institutional discourse, we first identified the word classes and keywords with significant frequency shifts between interrupted, interrupting, and regular sentences. Then, we associated the meanings of the keywords with offensive and defensive discourse strategies. The findings of this study indicate that interrupted sentences were more reflective of defensive discourse strategies, while interrupting sentences were associated with offensive ones. Moreover, conjunctions, adverbs, and pronouns played a more important role in the speech patterns of interruptions compared with their respective footprint in the lexicon. Conversely, nouns and verbs, with some exceptions, as well as adjectives, played a lesser role. We argue that the confrontational incentive structure in institutional debates creates certain linguistic patterns, mostly statistically significant frequency shifts of keywords in interrupted and interrupting sentences, and that these patterns might be useful in explaining interruption.

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**Keywords:** Speech Patterns, Spoken Chinese, Interruptions, Institutional Discourse

## 1. Introduction

Parliamentary discussions in Taiwan are reflective of the democratic nature of legislature. Audio-video recordings have well documented highly engaged lawmakers from all parties attacking opponents verbally and sometimes physically. Less studied, however, are the linguistic aspects of verbal confrontations during the institutional discourse. This study focused on verbal interruptions and their role in the nature of language. Due to the argumentative nature of parliamentary discussions, this type of discourse produced aggressive and extraordinary linguistic data, which revealed some specific properties of language, such as debate strategies, possible clausal boundaries, and context-tinged vocabulary.

Taking a corpus-based approach with a heightened focus on interruptions, this study aimed at addressing two main questions. First, which linguistic level explains interruptions better, parts of speech or keywords? In terms of parts of speech, we applied the automated tagging system developed by the Chinese Knowledge and Information Processing (CKIP) Lab. Keywords refer to the words that appeared significantly more often in interrupted and interrupting sentences compared with those in regular sentences. Second, how are keywords linked to discourse functions, and is there an underlying semantic relationship between the keywords and the discourse functions?

Finally, verbal interruptions do not happen in a vacuum. In agreement with Stainton (1987), certain situational contexts create an incentive structure for a confrontational style of conversation. Therefore, the notion of an “incentive structure” at least partly accounts for the explanation of interruptions.

## 2. Literature Review

### 2.1 Interruption

Previous research has shown that interruptions are caused by certain keywords, also called cues (Duncan, 1972; Wiemann & Knapp, 1975). Others have suggested that it is rather the intention and motivation of the interrupter that plays a key role (Oreström, 1983; Bazzanella *et al.*, 1991; Waltereit, 2002). Conversational analysts have considered interruptions a subtype of turn-taking, often with the implicit assumption that interruptions do not happen by chance but are linguistically marked (Sacks *et al.*, 1974).

Starting from this broader perspective, Ferguson (1977) presented a classification of turn-taking in conversations that distinguished between overlaps (i.e., the current speaker, despite the intervention, is determined to reach turn-completion) and a single interruption (i.e., the most common type), and that recognized interruptions as a mechanism of turn-taking along the lines

of illocutionary effects on the speaker and the hearer. Ferguson (1977) also mentioned other forms, such as smooth speaker switching (i.e., a change between two speakers with no interruptions) and silent interruptions (i.e., simple, silent interruptions that indicate that the current speaker should give up his or her turn). These other forms of interruptions require physical clues for identification, which was beyond the scope of this study.

As an early conversational analyst, Duncan (1972) also identified cues, such as turn-yielding cues, back-channel cues, and turn-maintaining cues, and construed them as triggers that indicated when turn-taking should take place. Wiemann and Knapp (1975) later expanded this list by adding turn-requesting cues. Oreström (1983) also claimed that interruptions cannot be satisfactorily described only with the help of formal criteria because a subjective element is always involved, and that there is no specific and unambiguous marker, grammatical or lexical, of turn-finality. Oreström (1983) suggested considering more factors to better classify interruptions and proposed a categorization based on grammatical boundaries and turn-taking, including loudness, speed, length, discourse content, floor winning, age and sex of the speaker, the manner of recording, and the ongoing speaker's reactions. Oreström (1983) further established a typology of reasons why interruptions happen and the interruption types observed in conversational practice, such as anti-communication (i.e., imperatives such as 'Stop that!'), protests (e.g., 'That's not true!'), and check-up questions (e.g., 'Why did you just say that?'). As Waltereit (2002) pointed out, this list was extended by Bazzanella (1991), who included the psychological element (i.e., interruptions that show emotional effect) and force majeure (i.e., interruptions that reflect that two speakers belong to different social power structures).

Signes (2000) continued along this line, that the kind of turn-taking resulting from an intervention also reveals the emotional orientation of the speakers toward the institutional character of the interaction, the internal social status and mind-set of the speakers, and the identities taking part in it. At odds with Hutchby (1996), Signes (2000) argued that interruptions are dualistic in nature, that is, cooperative and/or disruptive; that what counts as cooperative or disruptive is subjective, depending on what the speaker/listener thinks; and, finally, that the interpretation of an interruption is dyadic and intersubjective in nature, meaning that the interpretation is influenced not only by the participants of the conversation but also by the basic setting or type of conversation. In terms of classification, Signes (2000) categorized interruptions by function: interruptions, overlaps, and parenthetical remarks. Levinson (1983) added inadvertent overlaps and violative interruptions to that list.

More recently, Waltereit (2002), based on the earlier work of Jefferson (1978) and others, discussed interruptions in terms of a conversational practice, summarizing that interruptions are a normal part of the conversational practice and, to a certain extent, are tolerated if a speaker points to something extremely urgent or considers the current conversation irrelevant. Waltereit (2002) mentioned research by Tannen (1984) and Bazzanella (1991), who posited that

interruptions can even be regarded as a form of positive politeness if they are aimed at cooperative joint formulation.

In the search for causes of interruptions, links have been made to discourse markers. Nor (2012) demonstrated that discourse markers (Fraser, 1990) such as ‘well’, ‘now’, and ‘and’ are used as turn-initial interruptive devices and used Schegloff’s (2002) framework of what constitutes an interruption in turn-taking, with a focus on the functions of discourse markers. However, verbal interruptions in the Chinese-speaking context are still underresearched, especially interruptions related to institutional discourse.

## 2.2 Incentive Structure

As shown in the previous section, the literature on interruptions has identified certain formal interruption types linked to motivation, such as imperatives, protests, and check-up questions, but it is overly simplistic to argue that interruptions are either directly encouraged or caused by cues or discourse markers. Instead, Stainton (1987) provided some arguments in considering the incentive structure of interruptions, asserting that the distribution of interruption types is influenced by situational context, that the degree of social distance between the participants is an important factor, and that different degrees of social distance influence the frequency of interruptions. Stainton’s (1987) argument is important because it can be extended to include politically and socially constructed distance, such as that in different political parties and in pursuing different political goals.

In this study, we investigated how interruptions emerged in the context of political interpellations. We hypothesized that, specifically in the context of political interpellations, the underlying incentive structure promotes discourse strategies that include interruptions and other aggressive speech acts in order to create specific illocutionary effects and dominance over the discourse opponent and to undermine the opponent’s credibility. The literature on interruptions in political discourse is rather limited, but Goldberg (1990) held that although not synonymous with power, some interruptions may indeed signal power, rapport, and cooperation, differentiating in general between power interruptions and non-power interruptions. According to Goldberg (1990), power interruptions can be understood as a power play between two interlocutors, in which the interrupter breaks in and cuts off the speaker as a way to display social power. Such a display of social power is understood as an act of competition, or even conflict, and is regarded as impolite, rude, and forthrightly hostile or disrespectful toward the speaker and his or her message.

This line of reasoning has drawn attention to one important element in the incentive structure: power. Power is a social construct and a quantifiable factor, at least nominally, in political interpellations because speakers belong to different parties and different groups within the political system, either in the government or as legislators—most typically, members of the

parliament are conducting an interpellation, and a member of the government is answering. This setting makes clear Goldberg's (1990) differentiation between power and non-power interruptions. In interpellations, the incentive structure rewards speech actions that aim at questioning, showing power, ridiculing, and pressing. Furthermore, Hutchby (1996) distinguished between cooperative and non-cooperative interruptions with the idea that an interruption can be purposeful and can be used as a rhetorical device, instead of being just passively triggered by cues. The current study agrees with the notion of "interruption on purpose"; therefore, interrupted and interrupting sentences were examined separately.

In summary, an incentive structure shapes the motivation of participants to communicate in a certain way and hence is more directly associated with discourse strategies, and even linguistic expressions, than with context or intersubjectivity. We hypothesized that interruption effects could be observed at, albeit not fully explained by, the parts-of-speech level.

### **2.3 Defining Interruption Incentive Structure**

In this study, we considered sentences "interrupted" if marked as such in the official transcripts provided by the official website of the Legislative Yuan of the Republic of China (Taiwan). Specifically, interrupted sentences were those that were explicitly marked as incomplete, using a set of three dots to indicate an ellipsis (...) at the end of an utterance.

We regarded any sentence that directly followed an interrupted utterance an "interrupting" sentence; hence, each interrupted utterance had an interrupting counterpart. In a few cases, an interrupting sentence was interrupted by a following sentence, and those special cases were listed as both interrupted and interrupting. Due to their small number, the impact on the analysis was negligible.

Any sentence that was neither interrupted nor interrupting was defined as a "regular" sentence that ended with a full stop (.), an exclamation mark (!), or a question mark (?), rather than an interrupted/interrupting sentence that ended with an ellipsis (...). Moreover, since our definition of interrupted was limited to sentences, grammatically defined as a complete syntactic unit in written or spoken form, and did not include utterances, which generally refer to any number of words spoken (uttered) during a conversation, utterances were irrelevant in our analysis. However, because the data was extracted from the official transcripts of the Legislative Yuan of Taiwan, we therefore used the terms "sentence" and "utterance" interchangeably in the discussion presented in this paper.

### 3. Methodology

#### 3.1 Corpus

The corpus of this study was built from the transcribed recordings of various official meetings of Taiwanese lawmakers and ministers, which are publicly available on the official website of the Legislative Yuan of the Republic of China, Taiwan (立法院中部辦公室).<sup>1</sup> The transcribed materials included in the corpus were extracted from the documents and records shown in Tables 1 and 2:

**Table 1. Minutes of the 5th meeting of the 2nd session of the 9th Legislative Yuan**

No.	Dates	Meetings or Topics
#71	29 Sep. 2016	Finance Committee Meeting
#71	29 Sep. 2016	Joint meeting of the two committees of the Interior, Justice and Legal System; Transportation Committee Meeting; Social Welfare and Sanitation and Environment Committee Meeting
#71	11 Oct. 2016	Continue to question the President of the Executive Yuan's Policy Address—continued interrogation
#72	5 Oct. 2016	Interior Committee Meeting; Finance Committee Meeting
#72	5 Oct. 2016	Foreign Affairs and National Defense Committee Meeting
#72	6 Oct. 2016	Foreign Affairs and National Defense Committee Meeting
#72	12 Oct. 2016	Public hearing of the House-wide Committee Meeting

**Table 2. Minutes of the 6th meeting of the 2nd session of the 9th Legislative Yuan**

No.	Dates	Meetings or Topics
#73	5 Oct. 2016	Social Welfare and Hygiene Environment Committee Meeting; Education and Culture Committee Meeting
#73	14 Oct. 2016	Report matters, continue to inquire about the President's Policy Address—continued interrogation
#73	18 Oct. 2016	Continue to inquire about the President's Policy Address—after the inquiries are answered, the Executive Yuan's reply part and the members' question part
#74	5 Oct. 2016	Transportation Committee Meeting
#74	13 Oct. 2016	House-wide Committee Meeting
#74	17 Oct. 2016	House-wide Committee Meeting
#74	19 Oct. 2016	House-wide Committee Meeting
#74	20 Oct. 2016	House-wide Committee Meeting

<sup>1</sup> The official website is available at: <http://lci.ly.gov.tw/>

The corpus contained 18,050 utterances from 159 speakers, including 395,235 words. Of all the recorded utterances, 1,089 utterances (6%) were marked by the Legislative Yuan as incomplete, which were defined as interrupted sentences (see Section 2.2). The interrupted sentences included 18,629 words, and the interrupting sentences totaled 18,370 words, as shown in Table 3 below. The interrupting sentences were mostly questions and statements, with exclamations making up about 9% of all the interrupting sentences.

**Table 3. Sentence types in the corpus**

Sentence Types	Sentence Counts	Word Counts
Regular sentences	15,872	358,236
Interrupted sentences	1,089	18,629
Interrupting sentences	1,089	18,370

### 3.2 Limitations

To clarify the limitations of this study, a few things should be noted. First, the analysis was solely based on the official written transcripts of the parliamentary interpellations. We did not interpret what might or might not count as an interrupted sentence but instead relied fully on the definition provided by the Legislative Yuan.

Second, the Legislative Yuan did not transcribe the conversations according to the conventions of Conversation Analysis. Information about intonation, among other speech elements, was not available. The Legislative Yuan did not provide an official definition of exactly which circumstances stenographers were advised to mark an interruption with an ellipsis. However, based on our extensive reading of the materials, the official transcripts were consistent in terms of formatting and level of transcription detail. For example, throughout the transcripts, final particles expressing emotions, such as *a* (啊), *o* (喔), and so on, occurred frequently, as expected.

Third, we did not examine audio or video recordings to verify that each interruption was accurately recorded to the syllable. We noticed, however, that cut-off words were not found in the transcript, such as *ban...* (辦...) for *banshichu* (辦事處) ‘office’. The microphones of the speakers were open during the conversations; it was, therefore, possible for any speaker to speak over someone else. The stenographers could hear the end of an interrupted sentence as well as the beginning of an interrupting sentence as clearly as anyone else.

Finally, we had no information about overlaps. It was reasonable to assume that some overlapping occurred, but due to the nature of the transcriptions, there was no way of knowing when and how the overlapping occurred.

Despite those limitations, the database represents the first large-scale statistical, and linguistic attempt to look into the phenomenon of interruptions in the Chinese-language context. We maintain that the amount of data extracted allowed us to address how interruptions in the discourse were realized more objectively, repeatedly, and in a data-driven way than using a small-scale but very detail-oriented approach.

### 3.3 Calculation

#### 3.3.1 Test 1: Word-by-Word Comparison

In order to realize whether a word appeared more or less often in interrupted and interrupting sentences than in regular sentences, we compared words on both the word level and the parts-of-speech level. We compared the frequency of each word against itself across the three sentence types (i.e., interrupted, interrupting, and regular) using a two-side *t*-test based on the weight differences that each word exhibited.<sup>2</sup> The weight differences were approximately normally distributed (see Figures 1 to 4); therefore, we calculated a z-score<sup>3</sup> that represented the standardized deviation from the mean value. Its associated *p*-value indicated how likely it was that the observed deviation would occur due to chance, rather than, in our case, caused by interruption effects. We repeated this calculation independently for each word in the interrupted and interrupting sentences. Table 4 demonstrates this with an example of the word *qishi* (其實) ‘actually’:

**Table 4. Word frequency differences across the three different sentence types**

Words	English	Weight	Weight Regular <sup>†</sup>	Weight Difference	Z-scores	P-values
<b>Interrupted Sentences</b>						
其實	actually	0.0033	0.0019	0.0013	3.6883	0.0002
<b>Interrupting Sentences</b>						
其實	actually	0.0013	0.0019	-0.0006	-2.1062	0.0352

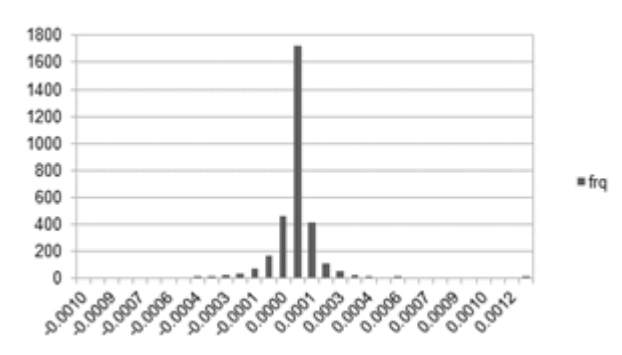
**Note:** <sup>†</sup>Weight Regular=weight in the regular sentences.

<sup>2</sup> The weight of a word refers to the proportion of the sum of all instances of a word  $x_i$  over the sum of all in-stances of all other words  $x_j$  within the same sentence type,  $w=(\sum x_i)/(\sum x_j)$ , either interrupted, interrupting, or regular. Weight difference refers to comparing weights between sentence types.

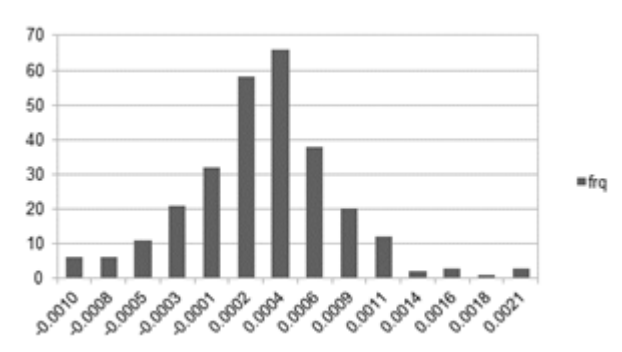
<sup>3</sup> The standard z-score is defined as  $z=(x-\mu)/\sigma$ .



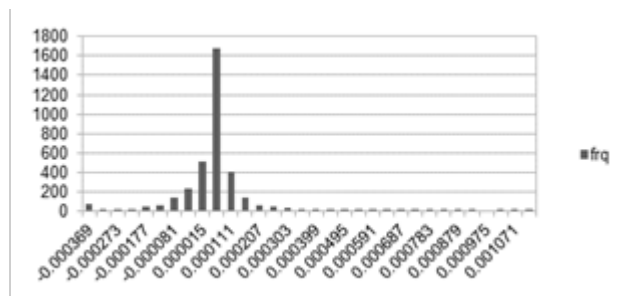
Figures 1 to 4 show the distribution of the weight differences for the words between interrupted, interrupting, and regular sentences. The plots in Figures 1 and 3 show all the words, and the plots in Figures 2 and 4 only show frequently occurring words (count  $\geq 10$  in the entire transcript).



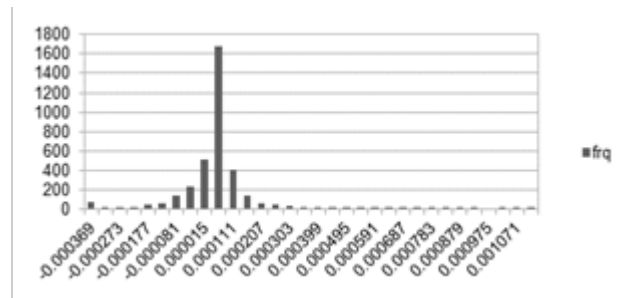
**Figure 1. Distribution of weight differences for all words in the interrupted sentences**



**Figure 2. Distribution of weight differences for words with  $\geq 10$  occurrences in the interrupted sentences**



**Figure 3. Distribution of weight differences for all words in the interrupting sentences**



**Figure 4. Distribution of weight differences for words with  $\geq 10$  occurrences in the interrupting sentences**

The figures above demonstrate that the weight differences across all (or only a subset of) the words were normally distributed. Therefore, we calculated a z-score for each word, and its associated  $p$ -value measured how likely that, compared with its baseline in the regular sentence, an increased or decreased occurrence of a word in the interrupted and interrupting sentences would randomly occur. As the analysis shows, some of the frequency shifts were explained by interruption effects.

### 3.3.2 Test 2: Comparing Word Rankings in Parts-Of-Speech Categories across Sentence Types

A second test was performed to check the variability of word rankings within the same parts-of-speech category. First, every word was given three rankings in its respective parts-of-speech category<sup>4</sup> or categories according to its frequencies in interrupted (ED-Ranking), interrupting (ING-Ranking), and regular (Regular Ranking) sentences. We compared the rankings against each other and excluded all words that had a ranking in one sentence type (mostly the regular sentence type) but did not appear in another sentence type (mostly the interrupted and interrupting sentence types). The resulting pairs of rankings were compared by a two-tailed Wilcoxon signed-rank test.<sup>5</sup> This test measured the significance of the word ranking differences (called “rank shifts”) in each parts-of-speech category compared to itself across the different

<sup>4</sup> Some Chinese words (character combinations) are associated with more than one word class. For example, words like *zhiqian* (之前) ‘before’ can be temporal nouns (Nd) or locative nouns (Ng); words like *buran* (不然) ‘otherwise, it is not’ can be either conjunctions (Cbb) or stative intransitive verbs (VH). Again, the categorization of each word in each sentence was tagged by the automated sentence tagger provided by CKIP.

<sup>5</sup> We used the Wilcoxon signed-ranks test calculator available at: <https://www.socscistatistics.com/tests/signedranks/default.aspx>

sentence types.<sup>6</sup> The test returned a *p*-value that suggested how likely the observed ranking differences in an entire parts-of-speech category would be attributed to random chance.<sup>7</sup> Our null-hypothesis was that the ranking of words within a category would be similar across sentences types (see Table 5). A preliminary explanation of instances in which this was not the case will be provided in the analysis.

The calculation of rank shifts was undertaken with the following considerations in mind. We limited the scope to only words that had at least 10 or more occurrences in the regular sentence type because, based on the absolute differences in type size, the low-frequency words in the larger-size regular sentence type had a much higher ranking than the low-frequency words in the smaller-size interrupted and interrupting sentence types when those words were included in the smaller-size sentence types. Due to the nature of the Wilcoxon signed-ranks test, these differences added up and caused the compounded overall ranking difference to be very large, resulting in false positives (i.e., very low *p*-values).

Following the same logic, we excluded all words in the regular sentence type that were not included in the interrupted and interrupting sentence types (i.e., zero-entry due to their low frequencies). Furthermore, to reflect the low limit of at least 10 occurrences in the regular sentence type, we also needed to take precautions against low-frequency words in the other two sentence types. Instead of using a hard cut-off as an arbitrary limit, we used the numerically highest ranking number minus 1 as an indicator for how many words above should be included. For example, in the numeral adverbs (Da) class,<sup>8</sup> the highest ranking number in the interrupted column was 8 (in total, five words had a ranking of 8, all with a frequency of one); therefore, we included only the first seven words. This was a simple yet robust method that, in effect, excluded most words in a category with the lowest frequency (=1), while at the same time it was sensitive to varying category sizes. In only a very few cases did we need to apply a hard cut-off of 100 words, such as when this method failed to limit the total word count to  $n=200$ .<sup>9</sup> In some other cases, only a *W*-value could be calculated, but not a *p*-value, because critical *N* ( $N \geq 20$ ) was not reached. In the few cases of a very low *N* size ( $\approx 10$ ), the Wilcoxon signed-ranks test failed. Due to space limitation, Table 5 shows a list of selected categories.

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<sup>6</sup> Rank shift is a simpler term for significant rank differences between types of sentences calculated by the Wilcoxon signed-rank test.

<sup>7</sup> In the few cases of *N* being lower than 20 words, a *p*-value could not be calculated so we used the *W*-value instead.

<sup>8</sup> Examples of the numeral adverbs (Da) class include *dayue* (大約) ‘about’, *zuiduo* (最多) ‘at most’, etc.

<sup>9</sup>  $n=200$  is the maximum count of items generally recommended for a Wilcoxon signed-rank test.

**Table 5. Within-category (parts of speech) comparison of word frequency rankings across the interrupted, interrupting, and regular sentence types**

Parts-of-speech Categories	P-value Rank Shifts ED↔ING	<i>n</i>	P-value Rank Shifts R↔ED	<i>n</i>	P-value Rank Shifts R↔ING	<i>n</i>
<b>Adjectives</b>						
A (ex. 公共)	0.3953	22	0.1031	20	0.4533	24
<b>Conjunctions</b>						
Caa <i>coordinating</i> (ex. 和)	not significant <sup>10</sup>	12	not significant <sup>11</sup>	10	not significant <sup>12</sup>	12
Cbb <i>subordinating</i> (ex. 如果)	0.6171	62	0.2627	41	0.5029	30
<b>Adverbs</b>						
D (ex. 儘量)	0.7490	100	0.1310	130	0.2670	123
Dfa <i>with degree</i> (ex. 非常)	0.7263	20	0.9283	14	not significant <sup>13</sup>	14
<b>Nouns</b>						
Na <i>regular</i> (ex. 問題)	0.2891	100	**0.0017	100	0.0629	100
NC <i>place names</i> (ex. 大陸)	0.4902	100	0.2041	96	0.3077	95
Ncd <i>locative</i> (ex. 裡面)	0.9761	20	0.1556	18	0.1310	20
Nd <i>temporal</i> (ex. 目前)	0.5093	31	0.4777	19	0.2713	31
Neqa <i>count nouns</i> (ex. 某些)	0.7949	28	0.7114	25	0.2041	28
Nh <i>pronouns</i> (ex. 我)	0.6384	20	0.5029	19	*0.0414	18
<b>Prepositions</b>						
P (ex. 至於)	0.3271	50	0.3681	53	0.9362	45
<b>Verbs</b>						
VA <i>intransitive</i> (ex. 犯罪)	0.5353	42	0.7566	38	0.0873	44
VC <i>transitive</i> (ex. 提出)	0.0000	186	0.1499	162	0.1096	177
VD <i>ditransitive</i> (ex. 提供)	0.5093	11	data insufficient	7	*0.0340	15
VE <i>verb + subclause</i> (ex. 認為)	0.3173	76	*0.0357	72	0.8026	65
VF <i>verb + verbal phrase</i> (ex. )	0.6101	14	0.4237	11	0.7566	12

<sup>10</sup> W=16, critical value for W at N=8 ( $p<0.05$ ) is 3.

<sup>11</sup> W=17, critical value for W at N=9 ( $p<0.05$ ) is 5.

<sup>12</sup> W=13, critical value for W at N=9 ( $p<0.05$ ) is 5.

<sup>13</sup> W=10, critical value for W at N=6 ( $p<0.05$ ) is 0.

Parts-of-speech Categories	<i>P</i> -value Rank Shifts ED↔ING	<i>n</i>	<i>P</i> -value Rank Shifts R↔ED	<i>n</i>	<i>P</i> -value Rank Shifts R↔ING	<i>n</i>
繼續)						
VG <i>category</i> (ex. 成為)	0.8493	23	0.0836	20	0.3222	21
VH <i>stative intransitive</i> (ex. 努力)	0.3953	127	0.3271	113	0.1615	116
VHC <i>causative</i> (ex. 落實)	not significant <sup>14</sup>	9	0.8887	16	0.5353	12
VJ <i>stative transitive</i> (ex. 沒有)	0.3030	47	0.5823	36	0.4237	40
VK <i>stative + subclause</i> (ex. 希望)	0.8729	36	0.0989	35	0.7490	28

**Note:** ED=interrupted sentence type; ING=interrupting sentence type; R=regular sentence type; \*= $p < 0.05$ ; \*\*= $p < 0.01$ .

As Table 5 demonstrates, most categories had comparable internal word rankings across the different sentence types, as expected. First, this suggested that not all words within a parts-of-speech category participated in the phenomenon of interruptions. Put differently, interruptions were not predominantly caused at the parts-of-speech level. However, we have to be careful with this statement because our analysis in Section 4 will also show that conjunctions, adverbs, and pronouns were overrepresented in the keywords, and nouns, verbs, and adjectives were underrepresented, compared with the overall percentage in the lexicon and the 100 most common words in the corpus. On the question of the relationship between parts of speech and interruptions, the status and function of a keyword was not predicated on its specific placement within a parts-of-speech category. Yet some parts-of-speech categories participated more actively in interruptions than other categories did. The underlying mechanism of interruptions might be best understood as being related to both frequency and semantics. On the one hand, most of the keywords were very common words, while on the other hand, we did not find that the keywords were semantically random; rather, we found that there was a relationship between discourse functions and strategies, as will be shown in Section 5.

### 3.4 Word Tagging and Parts of Speech

All the sentences in this corpus were tagged automatically, with no human intervention or correction, using the CKIP sentence tagger developed by the CKIP Lab at Academia Sinica (Ma & Chen, 2003).<sup>15</sup> CKIP differentiates 46 parts-of-speech categories, organized in 10 main groups.<sup>16</sup> Automated tagging arguably includes mistakes and is different from a parts-of-speech

<sup>14</sup>  $W=17$ , critical value for  $W$  at  $N=8$  ( $p < 0.05$ ) is 3.

<sup>15</sup> See [ckip.iis.sinica.edu.tw](http://ckip.iis.sinica.edu.tw)

<sup>16</sup> See [ckipsvr.iis.sinica.edu.tw](http://ckipsvr.iis.sinica.edu.tw)

analysis provided by a native speaker. We always followed the CKIP system because automated word tagging creates repeatable and comparable results.

### 3.5 Defining Keywords

Two conditions had to be satisfied to be classified as a keyword. First, a keyword was a word that appeared at least 10 times in the entire corpus, and second, its associated  $p$ -values (one for its frequency in interrupted sentences and one for its frequency in interrupting sentences) had to be at least 0.05 or lower. The  $p$ -value was interpreted as the likelihood that the difference in frequency between its usage in regular sentences and interruption sentences would occur due to random chance. This threshold was set arbitrarily but was based on the assumption that often-appearing interruption effects would be observed by often-appearing structural features. We did not exclude the possibility that some other systematic trigger stimulus also existed.

We referred to significant words as keywords in the study, whether they appeared in interrupted or interrupting sentences. A strict distinction between these two sentence types (i.e., interrupted and interrupting) was unnecessary because each type was clearly delineated whenever they appeared.

#### 3.5.1 Position of Keywords in a Sentence

Once a keyword was statistically identified, we did not know where exactly it appeared in a sentence. As explained above, we did not calculate the distance from the truncated turn-final position because in considering word position, we did not know how to relate “difference from turn-final” to any random position in a regular sentence. We considered the position of a word in a regular sentence to be random and to co-vary with content-dependent factors. Therefore, a keyword was accounted for only by its appearance in an interrupted, interrupting, or regular sentence, not by its location. As a consequence, any keyword(s) in a sentence—by itself or in cooperation with other keywords—was regarded as important, independent of location.

#### 3.5.2 Marking Keywords in Example Sentences

In each given example sentence in the analysis, the selection of the keyword was used for exemplary purposes only. For example, our analysis showed that pronouns were important in explaining interruptions. Therefore, to demonstrate the importance of pronouns, we selected a few example sentences from the database that included a pronoun. According to our subjective reading, these example sentences clearly demonstrated the interruption effect of pronouns, as shown in (1) below<sup>17</sup>:

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<sup>17</sup> Note that in the example sentences shown, specific selected keywords were not necessarily responsible for triggering the interruptions. The example sentences were meant to demonstrate that a specific

- (1) 195:a 我跟李部長也有在討論這個問題…  
'Minister Li and I are also discussing this issue…'

Note that in (1) above, the word *wenti* (問題) 'problem' was not considered a keyword because its associated *p*-value was not significant. Although it appeared very often, its frequency was relatively consistent across all types of sentences—regular, interrupted, and interrupting. The same was the case for all the other words in this example sentence, including *gen* (跟) 'with/and', *ye* (也) 'also, too', *you* (有) 'have', *zai* (在) 'is, in, (grammatical particle)', *taolun* (討論) 'discuss', *zhe* (這) 'this', and *ge* (個) '(counting particle)'. The only other possible valid keyword, next to *wo* (我) 'I', according to the test results, was *buzhang* (部長) 'minister', as discussed in the names and personal titles section. We chose *wo* 'I' here on subjective grounds. In fact, *wo* 'I' and *buzhang* 'minister' might have co-triggered the interruption as two or more keywords can jointly trigger interruptions.

#### 4. Analysis

This section will present the analysis of the interrupted and interrupting sentences, which were organized by parts of speech. The most common keywords were not distributed in the same way across parts-of-speech categories as suggested by their overall number in the corpus (and by extension in the lexicon). Conjunction, adverb, and pronoun keywords were overrepresented, while noun, verb, and adjective keywords were underrepresented. This suggests that, if anything, some parts-of-speech categories were more important for interruptions than others and, conversely, that some parts-of-speech categories play a less important role. Table 6 shows the comparison of the distribution of total word counts in the corpus in each parts-of-speech category and their respective percentages with that of the total word counts of the keywords. In both cases, only word types were calculated.

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keyword was *somehow* involved in the speech act of interruption, but this did not imply that it alone caused the interruption. In fact, it was possible that all the keywords identified in this study only represented an epiphenomenal linguistic pattern, one that was only correlated with interruptions on the surface level but was unrelated to causation.

**Table 6. Distribution of parts-of-speech categories in the corpus vs. distribution of keywords**

Parts of Speech	Word Counts (Corpus)	% of Total	Word Counts (Keywords)	% of Total
(A) Adjectives	265	1.5%	0	0.0%
(C) Conjunctions	130	0.7%	9	9.1%
(D) Adverbs	813	4.6%	22	22.2%
(N) Nouns	9,017	51.0%	29	29.3%
(Nh) Pronouns	57	0.3%	10	10.1%
(O) Others	186	1.1%	11	11.1%
(V) Verbs	7,205	40.8%	18	18.2%
Total	17,673	100.0%	99	100.0%

Furthermore, keywords were not to be confused with the most frequent words. A keyword is different from a regular frequent word in that it shows a specific significant frequency shift across different sentence patterns, whereas a regular frequent word appeared similarly frequently across all sentence types. We demonstrated this by looking at how many of the most common words also appeared in the list of keywords. Keywords that were also among the most common words were arguably less strictly related to interruptions than keywords only.

**Table 7. Comparison of the top 100 most common words that also appeared in the list of keywords**

Parts of Speech	Word Counts (Most Common 100 Words)	Most Common Words – Keywords	Most Common Words – Keywords	Keywords – Most Common Words	Keywords – Most Common Words
(A) Adjectives	0	0	0	0	
(C) Conjunctions	11	8	3	1	不過
(D) Adverbs	22	17	5	5	一定, 不要, 又, 比較, 當然
(N) Nouns	26	18	8	11	一些, 上, 中, 主席, 事實, 基本, 委員會, 政策, 期, 案件, 話
(Nh) Pronouns	10	10	0	0	
(O) Others	13	8	5	3	嘛, 得, 至於
(V) Verbs	18	12	6	6	問, 回答, 有關, 為, 謝謝, 進行
Total	100	73	27	26	



Conversely, words that were the most common across any sentence type but did not appear in the list of keywords were least relevant for the topic at hand.

As Table 7 demonstrates, the most frequent words and keywords were notionally different. To give a general picture, Table 7 does not differentiate between keywords occurring in either interrupted or interrupting sentences—or its increased or decreased tendencies for that matter—but reports only the overall sum. If a certain keyword appeared in both the interrupted and interrupting sentences in a significant way, it was counted only once in the table. However, as we proceed with the analysis in more detail below, we count keywords in the interrupted and interrupting sentences separately.

Table 7 also shows that although some keywords were also the most frequent, roughly one-quarter (26 out of 99) of the keywords were not. Conversely, 27 words were very frequent but did not count as keywords. As a general rule, words with significant frequency shifts in the interrupted sentences were non-significant in the interrupting sentences, and vice versa. This is important to note when comparing numbers between the sentence types. In the following, we will introduce each parts-of-speech category and its contribution to interruptions in detail before we discuss the possible relationships between the parts of speech and discourse functions and strategies in Section 5.

#### 4.1 Pronouns

In terms of the interrupted sentences, we observed that first-person pronouns were used significantly more often than in the regular sentences, but the use of second-person pronouns significantly decreased, as shown in Table 8 below. We counted 766 instances of *wo* (我) ‘I’, *women* (我們) ‘we’, and *ziji* (自己) ‘self’—in contrast to only 106 instances of *ni* (你) ‘you’ (sg.), *nimen* (你們) ‘you’ (pl.), and *nin* (您) ‘you’ (polite)—in the interrupted sentences. This suggests a situation in which the interrupted speaker adopted a defensive strategy to explain his or her view while being constantly attacked. It could also mean that the legislators were more likely to be interrupted when they spoke about themselves and their in-group.

**Table 8. Pronouns in the interrupted sentences**

Parts of Speech	Words	English	Weight Interrupted*	Weight Regular†	Tendency	P-value
Pronoun (Nh)	我	I, me	0.0229	0.0146	increased	0.0000
Pronoun (Nh)	我們	we	0.0172	0.0112	increased	0.0000
Pronoun (Nh)	本席	myself	0.0006	0.0022	decreased	0.0000
Pronoun (Nh)	你	you	0.0036	0.0088	decreased	0.0000
Pronoun (Nh)	你們	you (pl.)	0.0012	0.0026	decreased	0.0000
Pronoun (Nh)	您	you (polite)	0.0009	0.0022	decreased	0.0000

**Note:** \*Weight Interrupted=weight in the interrupted sentences; †Weight Regular=weight in the regular sentences.

Table 8 above shows a sample of pronouns with significant frequency shifts between the interrupted and the regular sentences. Out of the 24 pronouns found in the interrupted sentences, only eight (six shown here) exhibited significant frequency shifts.

In the interrupting sentences, on the other hand, we observed a significant increase in both second-person (singular and plural) pronouns and first-person (singular) pronouns, as shown in Table 9 below. This suggests that, in contrast to the defensive discourse strategy in the interrupted sentences above, the interrupters often directed their verbal attacks toward an individual or a group.

**Table 9. Pronouns in the interrupting sentences**

Parts of Speech	Words	English	Weight Interrupting*	Weight Regular†	Tendency	P-value
Pronoun (Nh)	你	you	0.0209	0.0088	increased	0.0000
Pronoun (Nh)	我	I, me	0.0183	0.0146	increased	0.0000
Pronoun (Nh)	你們	you (pl.)	0.0052	0.0026	increased	0.0000
Pronoun (Nh)	他們	they, them	0.0038	0.0028	increased	0.0020
Pronoun (Nh)	我們	we	0.0089	0.0112	decreased	0.0000

**Note:** \*Weight Interrupting=weight in the interrupting sentences; †Weight Regular=weight in the regular sentences.

Table 9 shows a sample of pronouns with significant rank shifts between the interrupting and the regular sentences. Many more words, marked as pronouns by CKIP, did not follow this pattern, for example: *nin* (您) ‘you (polite)’, *benxi* (本席) ‘myself’, *dajia* (大家) ‘everybody’, *shei* (誰) ‘who’, and *benshen* (本身) ‘myself’, among others. Out of the 28 pronouns found in the sentences, only seven (five shown here) had a *p*-value <0.05 in the interrupting sentences.

## 4.2 Conjunctions

As a parts-of-speech category, conjunctions did not exhibit sufficiently different occurrence patterns between the interrupted, interrupting, and regular sentences. However, some individual conjunctions showed significant interruption effects, specifically *yinwei* (因為) ‘because’, *suoyi* (所以) ‘therefore’, *danshi* (但是) ‘but’, and *ruguo* (如果) ‘if’. We observed this tendency also for the noun *yuanyin* (原因) ‘reason’, but to a lesser extent. These functional words were used to indicate reasoning and to present arguments in a logical fashion. This suggests that the interlocutors were more likely to be interrupted when they used reason during political debates.

In the interrupting sentences, the conjunction *suoyi* ‘therefore’ followed the pattern of *yinwei* ‘because’; however, whereas *yinwei* ‘because’ showed a significant increase in usage only in the interrupted sentences, *suoyi* ‘therefore’ was used significantly more often in both types of sentences as a general marker of interruptions. Break points were associated with the

use of restrictive conjunctions such as *danshi* ‘but’ and *ruguo* ‘if’ and to some degree also with *keshi* (可是) ‘but’. When used by the interrupted speaker, restrictive conjunctions indicated the speaker’s intention to introduce a different argument. From the opponent’s perspective, however, formulating a nuanced argument invited opposition. Out of the 55 conjunctions included in the list of interrupted sentences, only the six listed below in Table 10 showed significant rank shifts:

**Table 10. Conjunctions in the interrupted sentences**

Parts of Speech	Words	English	Weight Interrupted*	Weight Regular†	Tendency	P-value
Conjunct. (Cbb)	因為	because	0.0084	0.0040	increased	0.0000
Conjunct. (Cbb)	所以	therefore	0.0063	0.0043	increased	0.0000
Conjunct. (Cbb)	如果	if	0.0055	0.0035	increased	0.0000
Conjunct. (Cbb)	但是	but	0.0040	0.0029	increased	0.0026
Conjunct. (Cbb)	不過	but	0.0013	0.0006	increased	0.0434
Conjunct. (Caa)	及	and	0.0012	0.0022	decreased	0.0054

**Note:** \*Weight Interrupted=weight in the interrupted sentences; †Weight Regular=weight in the regular sentences.

In the interrupting sentences, the situation was different, as shown in Table 11. Only the conjunction *suoyi* ‘therefore’ showed a significant increase in usage frequency in the interrupting sentences, arguably because *suoyi* ‘therefore’ was often used to ask questions and formulate a conclusion in a dialogue. The remaining four words were not associated with semantic patterns and hence remain currently unexplained. Out of the 44 conjunctions included in the list of interrupting sentences, the five conjunctions below in Table 11 showed significant rank shifts:

**Table 11. Conjunctions in the interrupting sentences**

Parts of Speech	Words	English	Weight Interrupting*	Weight Regular†	Tendency	P-value
Conjunct. (Cbb)	所以	therefore	0.0064	0.0043	increased	0.0000
Conjunct. (Caa)	及	and	0.0010	0.0022	decreased	0.0002
Conjunct. (Caa)	和	and	0.0011	0.0019	decreased	0.0071
Conjunct. (Caa)	與	and	0.0010	0.0017	decreased	0.0186
Conjunct. (Cbb)	而	and, but	0.0015	0.0022	decreased	0.0217

**Note:** \*Weight Interrupting=weight in the interrupting sentences; †Weight Regular=weight in the regular sentences.

### 4.3 Nouns

Nouns comprised the largest parts-of-speech category, making up roughly 50% of the corpus. However, they contributed only 29 words to the list of keywords, which was 29% of the keywords. Of those 29 keywords, 11 nouns were in the list of keywords but were not found in the top 100 most common words, so they were the best candidates for further analysis. Tables 12 and 13 below show some of the nouns of interest:

**Table 12. Noun keywords in the interrupted sentences that were not also in the top 100 most common words**

Parts of Speech	Words	English	Weight Interrupted*	Weight Regular <sup>†</sup>	Tendency	<i>P</i> -value
Nouns (Na)	事實	fact	0.0017	0.0008	increased	0.0107
Nouns (Na)	基本	basis	0.0013	0.0004	increased	0.0195
Nouns (Nf)	期	term	0.0013	0.0002	increased	0.0043
Nouns (Na)	案件	case	0.0014	0.0007	increased	0.0319

**Note:** \*Weight Interrupted=weight in the interrupted sentences; <sup>†</sup>Weight Regular=weight in the regular sentences.

**Table 13. Noun keywords in the interrupting sentences that were not also in the top 100 most common words**

Parts of Speech	Words	English	Weight Interrupting*	Weight Regular <sup>†</sup>	Tendency	<i>P</i> -value
Nouns (Na)	話	talk, speech	0.0025	0.0012	increased	0.0001
Nouns (Na)	主席	chairman	0.0002	0.0013	decreased	0.0002
Nouns (Na)	政策	policy	0.0005	0.0013	decreased	0.0063
Nouns (Nc)	委員會	committee	0.0001	0.0008	decreased	0.0170

**Note:** \*Weight Interrupting=weight in the interrupting sentences; <sup>†</sup>Weight Regular=weight in the regular sentences.

Furthermore, referring back to Table 5, regular nouns (Na), as a category, showed one of the most significant rank shifts between the interrupted and regular sentences ( $p < 0.0017$ ). The statistical explanation was that regular nouns—as well as regular adverbs (D) and verbs (VE) (to a lesser degree)—in the interrupted sentences yielded the highest count of absolute ranking differences: 6% for the top 100 words, followed by 26% for the top 1,000 and 32% for the top 10,000 words. This suggested that frequently used nouns in the regular sentences did not appear in the interrupted sentence, and vice versa. The discourse explanation was that the regular nouns were highly content-dependent and were supposed to co-vary strongly with the topic.

Another issue involved temporal nouns. The CKIP team classified the words *muqian* (目前) ‘currently’, *guoqu* (過去) ‘past’, and *dangshi* (當時) ‘now’ as temporal nouns in Chinese because they either were composed of a noun (e.g., *mu* ‘eye’, *shi* ‘time’) or could be used as a noun (e.g., *guoqu* ‘past’). In English, however, they are not classified as nouns but as adverbials. In the interrupted sentences, these three words showed a significant shift in frequency. We argue that they functioned as downtoners that were used in defensive discourse strategies, indicating a temporal limitation to what was being said to appear restrained or cautious.

**Table 14. Temporal nouns in the interrupted sentences**

Parts of Speech	Words	English	Weight Interrupted*	Weight Regular†	Tendency	P-value
Temp. Noun (Nd)	目前	currently	0.0035	0.0018	increased	0.0000
Temp. Noun (Nd)	過去	ago, before, previously	0.0017	0.0012	increased	0.1862
Temp. Noun (Nd)	當時	before	0.0012	0.0006	increased	0.1614
Temp. Noun (Nd)	未來	in future	0.0007	0.0012	decreased	0.0902

**Note:** \*Weight Interrupted=weight in the interrupted sentences; †Weight Regular=weight in the regular sentences.

Although the word *muqian* ‘currently’ was the only temporal noun that showed significant rank shifts in the interrupted sentences (see Table 14), we nonetheless argue that the word was a good example of a downtoner, a keyword that appeared significantly more often in the sentences that were being interrupted. Our argument is that it represented more than just a temporal downtoner and reflected a certain attitude of what might be called “pseudo-objectivity,” that is, to appear objective and scientific. As such, it created argumentative boundaries that were very likely to be challenged by the opponent. In the interrupting sentences, *muqian* ‘currently’ exhibited a contrastive tendency and was used much less as an aggressive strategy. This suggested that *muqian* ‘currently’ played an important role in inviting interruptions, albeit arguably not intended by the speaker. In terms of the interrupting sentences, the word *xianzai* (現在) ‘now’ featured a higher frequency in the interrupting sentences than in the regular sentences, as shown in Table 15 below:

**Table 15. Temporal nouns in the interrupting sentences**

Parts of Speech	Words	English	Weight Interrupting*	Weight Regular†	Tendency	P-value
Temp. Noun (Nd)	現在	now	0.0060	0.0040	increased	0.0000
Temp. Noun (Nd)	目前	currently	0.0012	0.0018	decreased	0.0451

**Note:** \*Weight Interrupting=weight in the interrupting sentences; †Weight Regular=weight in the regular sentences.

#### 4.4 Adjectives

As a parts-of-speech category, the rank shifts of adjectives between the interrupted and the regular sentences showed a weak tendency ( $p \approx 0.10$ ). The adjectives *yiding* (一定) ‘necessary’, *yiban* (一般) ‘regular’, and *jiben* (基本) ‘basic’ exhibited weak interruption effects but not at a significant level ( $p > 0.05$ ). The reason might have been that the adjectives belonged to a group of content words and were expected to co-vary with speech content more than with interruption patterns.

#### 4.5 Verbs

In general, verb keywords were underrepresented in both lists of the top 100 most common words and significant keywords. Verbs made up roughly 41% of all the words in the database but accounted for only 18% of the keywords. Furthermore, there were 18 words in the top 100 most common words. This suggested that verbs were less relevant as keywords. In total, three subtypes of verbs showed a significant rank shift: transitive verbs (VC) were significantly different between the interrupted and the interrupting sentences ( $p < 0.0455$ ); ditransitive verbs (VD) were different between the interrupting and the regular sentences ( $p < 0.0340$ ); and verbs with adjunct subclauses (VE) were different between the interrupted and the regular sentences ( $p < 0.0357$ ), as shown in Table 16 below:

**Table 16. Verb classes with significantly different within-rank shifts between various categories**

Parts of Speech	<i>P</i> -value Rank Shift ED↔ING	<i>n</i>	<i>P</i> -value Rank Shift R↔ED	<i>n</i>	<i>P</i> -value Rank Shift R↔ING	<i>n</i>
VC transitive (ex. 提出)	*0.0455	186	0.1499	162	0.1096	177
VD ditransitive (ex. 提供)	0.5093	11	data insufficient	7	*0.0340	15
VE verb + subclause (ex. 認為)	0.3173	76	*0.0357	72	0.8026	65

**Note:** ED=interrupted sentences; ING=interrupting sentences; R=regular sentences; \*= $p < 0.05$ .

The question of why VC and VD verbs showed significant interruption effects remains unanswered at the moment. In terms of the VE verbs, we also speculate that they showed significance because they often appeared at the beginning of a sentence before the interruption took place. The 10 most common VE verbs were: *qingwen* (請問) ‘may I ask’ ( $p < 0.0000$ ), *jiang* (講) ‘say’ ( $p < 0.0210$ ), *tidao* (提到) ‘mention’ ( $p < 0.0531$ ), *dafu* (答覆) ‘to answer’ ( $p < 0.0572$ ), *zhixun* (質詢) ‘to question’ ( $p < 0.0808$ ), *qingjiao* (請教) ‘to consult’, *wen* (問) ‘ask’, *xunda* (詢答) ‘inquire’, *renwei* (認為) ‘argue’, and *kandao* (看到) ‘have seen’, all of which belonged to a subclass of discourse markers that were used to talk about speech content. The first two words showed interruption effects. *Qingwen* ‘may I ask’ was used significantly less often in the regular

sentences; *jiang* ‘say’, on the other hand, was used significantly more. The verbs *dafu* ‘to answer’ and *zhixun* ‘to question’ were used more by the questioning opponents and much less by the queried persons.

The most common verbs with a significantly increased occurrence in the interrupted sentences were *you* (有) ‘there is, have’, *meiyou* (沒有) ‘do not have’, *jiang* (講) ‘say’, *xiwang* (希望) ‘to hope’, and *kan* (看) ‘see’, and those with a significantly decreased occurrence in the interrupted sentences included *qing* (請) ‘please’, *rang* (讓) ‘let’, and *xiexie* (謝謝) ‘thank you’. With the exception of *xiexie* ‘thank you’, all of these words were found among the top 100 most common words in the corpus. Table 17 below shows some verbs with significantly changed behavior between the interrupted and the regular sentences. Most of these verbs were related to speech acts, which additionally explains why they appeared in the interrupted sentences more often.

**Table 17. Verbs in the interrupted sentences**

Parts of Speech	Words	English	Weight Interrupted*	Weight Regular†	Tendency	P-value
Verb (V_2)	有	have	0.0179	0.0140	increased	0.0000
Verb (VJ)	沒有	do not have	0.0041	0.0030	increased	0.0025
Verb (VE)	講	talk	0.0028	0.0019	increased	0.0210
Verb (VK)	希望	hope	0.0031	0.0023	increased	0.0277
Verb (VE)	請問	may I ask	0.0001	0.0017	decreased	0.0000
Verb (VF)	請	please	0.0017	0.0027	decreased	0.0000
Verb (VJ)	謝謝	thank you	0.0005	0.0013	decreased	0.0245

**Note:** \*Weight Interrupted=weight in the interrupted sentences; †Weight Regular=weight in the regular sentences.

Verb keywords in the interrupting sentences were mostly discourse-relevant verbs, a commonality they shared with the interrupted sentences. They often functioned as pragmatic markers or as short replies and were placed at the beginning of the interrupting sentence. Take, for example, *dui* (對) ‘correct, yes’ in (2) below:

- (2) 1122:a 第一個，如果我們能不用核一廠、核二廠，就儘量不用…  
 ‘The first one, if we can avoid the first nuclear plant and the second nuclear plant, try not to use it as much as possible…’
- 1122:b 對，大家都歡迎。  
 ‘Yes, everyone is welcome.’

We are aware that in Chinese grammar the negator *meiyou* (沒有) ‘do not have’ in (3) below is regarded as an adverb when used to negate an event/activity. CKIP, however, classifies it as a stative intransitive verb on these occasions. This might have also been the case for similar instances, as we always followed the CKIP classification in this study.

- (3) 8024:a 如果我剛才的回答有讓...  
 ‘If my answer just now makes...’  
 → 8024:b 沒有，你沒有回答，那是陳超明自己在自問自答，你沒有回答，這個還好。  
 ‘No, you didn’t answer, that was Chen Chaoming’s own question and answer, you didn’t answer, this is okay.’

Table 18 below shows some (10 out of 18) of the most frequent verbs with significant weight shifts between the interrupting and the regular sentences:

**Table 18. Verbs in the interrupting sentences**

Parts of Speech	Words	English	Weight Interrupting*	Weight Regular†	Tendency	P-value
Verb (VE)	說	say	0.0049	0.0033	increased	0.0000
Verb (VJ)	沒有	do not have	0.0045	0.0030	increased	0.0000
Verb (VE)	講	talk	0.0039	0.0019	increased	0.0000
Verb (VH)	對	correct, yes	0.0029	0.0018	increased	0.0016
Verb (VK)	知道	know	0.0028	0.0018	increased	0.0021
Verb (VE)	問	ask	0.0015	0.0008	increased	0.0217
Verb (VE)	回答	answer	0.0013	0.0004	increased	0.0094
Verb (VF)	請	please	0.0019	0.0027	decreased	0.0093
Verb (VC)	進行	conduct	0.0002	0.0010	decreased	0.0102
Verb (VJ)	謝謝	thank you	0.0007	0.0013	decreased	0.0372

**Note:** \*Weight Interrupting=weight in the interrupting sentences; †Weight Regular=weight in the regular sentences.



## 4.6 Adverbs

As a parts-of-speech category, adverbs showed some tendentious interruption effects, though not at a significant level. However, adverbs played a crucial role in the interruptions. They were overrepresented in both lists of the top 100 most common words and significant keywords. Adverbs made up less than 5% of all the words in the corpus, but they represented 22% of the top 100 most common words and 22% of the significant keywords.

We attributed their importance to the fact that adverbs, in general, are often used as modulators to express evaluations or colorize a statement. Looking at the meanings of the often re-occurring adverb keywords in the interrupted sentences, we can explain some of these in light of defensive discourse strategies, which restricted the scope of an argument (e.g., *bijiao* (比較) ‘(comparative)’, *keneng* (可能) ‘possibly’), showed confidence (e.g., *yiding* (一定) ‘necessary’, *dangran* (當然) ‘of course’), or colorized a statement (e.g., *qishi* (其實) ‘actually’.. Also noteworthy are the adverbs *yiding* (一定) ‘definitely’, *you* (又) ‘again’, *bijiao* (比較) ‘(comparative)’, and *dangran* (當然) ‘of course’ because these four keywords were not in the top 100 most common words. Table 19 below shows some significant adverbs in the interrupted sentences:

**Table 19. Adverbs in the interrupted sentences**

Parts of Speech	Words	English	Weight Interrupted*	Weight Regular <sup>†</sup>	Tendency	P-value
Adverb (D)	會	will, about to	0.0073	0.0058	increased	0.0000
Adverb (D)	其實	actually	0.0033	0.0019	increased	0.0002
Adverb (D)	已經	already	0.0032	0.0023	increased	0.0171
Adverb (D)	還是	maybe, or	0.0028	0.0019	increased	0.0107
Adverb (D)	可能	possibly	0.0024	0.0016	increased	0.0238
Adverb (D)	當然	of course	0.0021	0.0012	increased	0.0150
Adverb (D)	一定	definitely	0.0020	0.0011	increased	0.0076
Adverb (Dfa)	比較	more (degree)	0.0020	0.0012	increased	0.0324

**Note:** \*Weight Interrupted=weight in the interrupted sentences; <sup>†</sup>Weight Regular=weight in the regular sentences.

Adverbs also played an important role in the interrupting sentences but to a slightly lesser degree. The adverb *buyao* (不要) ‘do not’ was the only adverb with a significantly increased occurrence in the interrupting sentences that was not found among the top 100 most common words. That a negation adverb occupied such an important position supported the argument that the interrupting party used an offensive discourse strategy. Other common and significant

changes concerned adverbs such as *bu* (不) ‘no’, *ye* (也) ‘also’, *lai* (來) ‘come’, *jiu* (就) ‘(grammatical particle)’, *dou* (都) ‘all’, *yinggai* (應該) ‘should’, *keyi* (可以) ‘can’, *meiyou* (沒有) ‘no, none’, and *hai* (還) ‘still’ (see Table 20).

**Table 20. Adverbs in the interrupting sentences**

Parts of Speech	Words	English	Weight Interrupting*	Weight Regular†	Tendency	P-value
Adverb (D)	不	no, not	0.0162	0.0107	increased	0.0000
Adverb (D)	就	(particle)	0.0083	0.0060	increased	0.0000
Adverb (D)	會	will	0.0076	0.0058	increased	0.0000
Adverb (D)	沒有	no, none	0.0041	0.0025	increased	0.0000
Adverb (D)	已經	already	0.0034	0.0023	increased	0.0006
Adverb (D)	還	still	0.0032	0.0025	increased	0.0420
Adverb (D)	不要	do not	0.0021	0.0008	increased	0.0001
Adverb (D)	可以	can	0.0050	0.0040	increased	0.0055
Adverb (D)	應該	should	0.0023	0.0031	decreased	0.0106
Adverb (D)	其實	actually	0.0013	0.0019	decreased	0.0352

**Note:** \*Weight Interrupting=weight in the interrupting sentences; †Weight Regular=weight in the regular sentences.

In this section, we analyzed the frequency shifts of keywords in both the interrupted and the interrupting sentences, respectively. We discussed their relationship with the parts-of-speech categories and briefly addressed why the semantics of these words were related to their status as keywords. We noticed that the keywords were very common words with significant frequency shifts across sentence types, and therefore they were different from the regular high-frequency words. Moreover, the keywords were found in almost all the parts-of-speech categories, with the exception of adjectives. However, conjunctions, adverbs, and pronouns stood out for being overrepresented, compared with their footprint in the overall lexicon. That even grammatical particles were considered keywords might sound surprising. Yet, due to their significant frequency shifts and their underlying semantic commonalities, we had to consider this possibility seriously. In the following, we will discuss to what extent the meanings of the keywords were related to offensive and defensive discourse strategies.

## 5. Discussion

Based on the statistical analysis presented in the previous section, this section will discuss the possible discourse functions of the words that showed a significant increase or decrease in their usage in the interrupted and interrupting sentences compared with that in the regular sentences.

To begin with, the frequency shifts of conjunctions, such as *yinwei* ‘because’ and *suoyi* ‘therefore’, and adverbs, such as *buyao* ‘do not’ and *qishi* ‘actually’, suggests that the interruptions did not happen randomly. Rather, it is reasonable to assume that the changed frequency of the words’ functions was partially related to their semantics. Semantics might also explain why some words signaled specific discourse functions, such as showing disrespect, avoiding a concrete answer, and being downtoners (i.e., expressing pseudo-objectivity), among many more.

The link between individual word meanings and the general incentive structure may rest with discourse functions, which linked the underlying incentive structure to the keywords. The lawmakers often followed an offensive discourse strategy when the opposing ministers adopted a defensive discourse strategy. Generally speaking, an offensive discourse strategy was more associated with interrupting sentences, while a defensive discourse strategy was associated with interrupted sentences.

At this point, it is important to explain how we identified the discourse functions. After all the keywords were statistically identified and linked to offensive (interrupting sentences) and defensive (interrupted sentences) discourse strategies, we then grouped the keywords according to commonly shared themes, semantic fields, and objectives. For example, *buyao* + *V* ‘do not’ + Verb was an often re-occurring pattern in the interrupting sentences, and as such, its theme or objective was associated with ‘negation’, stopping the opponent verbally due to a strong disagreement. Moreover, *wo* ‘I, me’ appeared significantly more often in the interrupted sentences, which was associated with the function of self-reference. In other words, discourse functions provided the argumentative linkage between the semantic fields of the keywords and the objectively observed bifurcation of offensive and defensive discourse strategies under the incentive structure.

A defensive discourse strategy was often applied to avoid political mistakes using downtoners, especially to express pseudo-objectivity in order to appear knowledgeable, objective, and scientific. The following defensive discourse strategies were common: (i) self-reference—to interrupt people when they talked more about themselves than about the subject; (ii) reasonable presentation—to prevent a clear presentation of reason in order to disguise the arguments of the other side or to disallow them to present their case clearly and logically; (iii) over-limitation and pseudo-objectivism—to overly use semantic limiters (e.g., ‘to some degree’, ‘possibly’, ‘in fact’, ‘actually’, etc.); (iv) over-confidence—to use superlatives, amplifiers, and

intensifiers; and (v) subjective or personal evaluation—to express a subjective or personal evaluation.

Offensive discourse functions included the following: (i) negation—to show that the opponent was not true, not right, not informed, or not fit for the job; (ii) adversatives and opposition—to express rejection or contrast of opinion; (iii) superlatives—to use hyperbole to point out extremes, to draw a radical mental image, or to contrast an opponent’s ambiguous statement with an extreme counterpart; (iv) questions—to request more detailed information, (rhetorical questions) to indicate mocking or disbelief, or to request confirmation; and (v) direct address—the interrupter) to directly address his or her opponent either by name, position, or personal pronoun.

In what follows, we will discuss the interrupted sentences (defensive discourse strategies) before we look at the interrupting sentences (offensive discourse strategies) in Section 5.1.2.

## 5.1 Interrupted Sentences

### 5.1.1 Self-Reference

People who talked more about themselves and their group than about the subject matter were more likely to be interrupted. In the given incentive structure of institutional discourse, any pronounced reference to oneself was regarded as an invitation for interruption, as shown in (4) and (5) below:

- (4) → 8454:a 即使我不承認中華民國憲法或者我…  
 ‘Even if I don’t recognize the Constitution of the Republic of China or I…’  
 8454:b 我剛剛的講法並沒有任何的意思說我不認同這部憲法，我剛剛講法的重點是對這個問題我拒絕表態。  
 ‘What I said just now did not mean that I did not agree with the constitution. The point of what I said just now is that I refuse to express my position on this issue.’
- (5) → 6096:a 這樣的體制的確是有點混亂，所以我…  
 ‘Such a system is indeed a bit confusing, so I…’  
 6096:b 你不覺得林全像小媳婦？是不是？他只是管家而已啊。  
 ‘Don’t you think Mr. Lin Quan is like a little daughter-in-law? Is he not? He is just a housekeeper.’

### 5.1.2 Reasonable Presentation

In a verbal conflict, the side with the better argument is supposed to win; hence, given the incentive structure of the zero-sum game during a political verbal exchange, the attacking side was inclined to prevent the other from clearly presenting his or her argument. Ifs and buts were welcomed weak points ready for exploitation. We observed break points at *ruguo* (如果) ‘if’, *ruguo shuo* (如果說) ‘if’, and *jiaru* (假如) ‘if, in case’, among others, suggesting that arguments introduced with an irrealis were considered weaker because they were less likely to be true or relevant, as shown in (6) and (7) below:

- (6) → 462:a 總統曾經說過不排除任何的可能性，不過如果…  
‘The president once said that no possibility is ruled out, but if...’  
462:b 可能性高不高？  
‘Is the probability high?’

Counterfactuals belonged to the realm of hypotheticals and were often introduced with *fouze* (否則) ‘otherwise’, *buran* (不然) ‘if not’, *buguan* (不管) ‘no matter what’, *jiusuan* (就算) ‘even if’, *chufei* (除非) ‘unless’, *faner* (反而) ‘instead’, and others. We observed a tendency also for counterfactuals to appear in interrupted sentences, as shown in (7) below:

- (7) → 7253:a 我的猜測是，因為兩岸關係條例基本上、原則上的前提是不承認大陸的學歷，除非主管機關…  
‘My guess is that the basic and principle premise of the regulations on cross-strait relations is that mainland academic qualifications are not recognized unless the competent authority...’  
7253:b 沒有啦，我現在要講的就是，你討厭它可以，你不喜歡它也可以，兩岸關係緊張也可以，即使你認為它是共匪、共產黨都可以，可是現在對岸的北京大學、清華大學是不是比我們的台大排名還在前面，這也是事實。  
‘No, what I want to say now is, you can hate it, you can dislike it, and cross-strait relations can be tense, even if you think it is a communist bandit or the Communist Party, but aren’t Peking University and Tsinghua University on the other side of the bank ranked ahead of our National Taiwan University? That’s also the truth.’

### 5.1.3 Over-Limitation and Pseudo-Objectivism

In the given incentive structure of interpellations, the opposing parties sought to exploit each other's weaknesses and mistakes. This led to the discourse participants avoiding any overly subjective, absolute, or general statements. When adopting a defensive discourse strategy, they tried to appear balanced, objective, specific, and restrictive in their use of language. Hence, we observed many lexical items that were used as downtoners, or hedges, to limit a given proposition in terms of time, subject, certainty, relevance, and so on. A commonly observable lexical item with this discourse function was *muqian* (目前) 'currently', which worked as a protective shield against questions about past or future developments of a certain topic. But it also signaled limited knowledge or responsibility of the speaker. This category also included *duiyu* (對於) 'in regard to', *zhiyu* (至於) 'in regard to', *yixie* (一些) 'some', *bufen* (部分) 'partly', *dabufen* (大部分) 'mostly', *youde* (有的) 'some', *zhuyao* (主要) 'most importantly', *yinggai* (應該) 'should, possibly', *keneng* (可能) 'possibly', *chabuduo* (差不多) 'roughly', *huoxu* (或許) 'perhaps', *yingdang* (應當) 'should', *yuanze shang* (原則上) 'in principle', *zhaoli* (照理) 'theoretically', *bujiande* (不見得) 'not necessarily', *jinkuai* (儘快) 'as fast as possible', *jinzaao* (儘早) 'as soon as possible', *jinliang* (儘量) 'try to', *benlai* (本來) 'actually', *qishi* (其實) 'actually', *tanbai* (坦白) 'to be honest', and *dagai* (大概) 'roughly speaking'. An example of this defensive discourse strategy is shown in (8) below:

- (8) → 76:a 有就這部分做一些…  
 'If so then on this part do some…'  
 76:b 本席在這裡還是要向你提出最嚴正的抗議，如果你的民調要上來，如果你不能對美國、對日本說 NO，只一味在立法院蠻幹…  
 'Sir, I still have to lodge my most solemn protest here. If your polls are going to come up, if you can't say NO to the United States or Japan, just blindly do it in the Legislative Yuan…'

Related to the category of subject limiters were words that referred to a specific part or set of a category or topic, such as *yixie* 'some', *bufen* 'partly', *dabufen* 'mostly', *youde* 'some', and *zhuyao* 'most importantly', among others, as shown in (9) below:

- (9) → 3912:a 這個部分沒有…  
 'Nothing in this regard…'  
 3912:b 碰到你們自己的事情，你們就說跟他無關、跟你無關或跟誰無關。  
 'When it comes to your own affairs, you say that it has nothing to do with him,

with you, or with anyone.’

Self-limitation refers to an argument that is aimed at providing counter-proof or negative evidence of one’s own statement and that often signals weakness and invites verbal intrusion. This type of argument marker included *buguo* ‘but’, *danshi* ‘but’, *qishi* ‘actually’, and *tanbai* ‘to be honest’, among others, as shown in (10) below:

(10) → 6679:a 這個個案坦白講…

‘Frankly speaking…’

6679:b 不是個案。

‘Not a case.’

The limiters ‘possibility’, ‘expectation’, ‘certainty’, ‘importance’, and ‘ability’ were also present in the defensive discourse. Signaling a lack of knowledge, credibility, or responsibility, limiters were often exploited for interruptions, such as *yinggai* (應該) ‘should’, *keneng* (可能) ‘possibly’, *huoxu* (或許) ‘maybe’, *yingdang* (應當) ‘should’, *yuanzeshang* (原則上) ‘in principle’, *zhaoli* (照理) ‘reasonably’, *bujiande* (不見得) ‘not necessarily’, *jinkuai* (儘快) ‘as fast as possible’, *jinza* (儘早) ‘as soon as possible’, *jinliang* (儘量) ‘trying to’, and *benlai* (本來) ‘actually’, among others, an example of which is shown in (11) below:

(11) → 2430:a 這件事情其實各方都高度關注，所以我們去看了相關資料，事實上是有一些不是很清楚的地方應該要再…

‘In fact, all parties are paying great attention to this matter, so we went to read the relevant information. In fact, there are some unclear points that should be re…’

2430:b 對於投資案，你不要畫條線把它檔在門口，只因為懷疑它以前是強盜或什麼的，但沒有證據嘛，你要拿出證據來啊!

‘For investment cases, you should not draw a line to file it at the door, just because you suspect that it was a robber or something before, but there is no evidence, you have to show evidence!’

If a speaker lacked specific knowledge about a certain subject or procedure, he or she often retreated to general rules to provide a generic inference. In such cases, the speakers often used

*yuanzeshang* (原則上) ‘in principle’ or *jiben[shang]* (基本[上]) ‘basically’, as shown in (12) below:

- (12) → 1450:a 這個部分，我們尊重農委會的處理，原則上我們會…  
 ‘In this part, we respect the handling of the Council of Agriculture. In principle, we will...’
- 1450:b 剛才農委會主委說可以，是不是？  
 ‘Just now the chairman of the Council of Agriculture said yes, didn’t he?’

### 5.1.4 Over-Confidence

In contrast to the discussion above, words indicating too much confidence and certainty were also exploited for interruptions. These are also often called amplifiers, intensifiers, and boosters. In this study, they comprised a small number of words, which were arguably less relevant to why the sentences were interrupted in the political discourse. However, confidence, indeed, played an important role in the defensive discourse strategies. Words indicating confidence and certainty were, in general, helpful in protecting against interruptions. This category included words such as *yiding* (一定) ‘definitely’ and *dangran* (當然) ‘of course’, as shown in (13) below:

- (13) → 3154:a 目前是考量設在臺南或高雄，會由臺南與高雄雙方的首長做最好的規劃，不論規劃為何，原本臺南或高雄已在進行的工作一定不會…  
 ‘At present, it is considered that if it is located in Tainan or Kaohsiung, the heads of both Tainan and Kaohsiung will make the best plan. No matter what the plan is, the work that Tainan or Kaohsiung is already doing will definitely not...’
- 3154:b 你來自高雄，應該知道高雄原本就有一個熱帶醫學中心。  
 ‘You are from Kaohsiung. You should know that Kaohsiung originally had a tropical medicine center.’

Another example of over-confidence was words that indicated truth, proof, or the absence thereof, including *queshi* (確實) ‘indeed’ and *bukeneng* (不可能) ‘not possible’, see (14) below:

- (14) → 6696:a 法律要與時俱進，法律不可能一成不變，…  
 ‘The law must advance with the times, and the law cannot be immutable,...’
- 6696:b 對，但是我們所謂的溯及既往是以對當事人有利為原則，對不對？



‘Yes, but what we call retroactivity is based on the principle of benefiting the parties, right?’

### 5.1.5 Evaluation

The data suggest that certain lexical items or expressions related to judgments, either objective or subjective, triggered interruptions more often because evaluative words highlighted the speaker’s judgment about a discourse topic through emotional effort (*nuli*), a difference (*butong*), or something regarded as special (*teshu*), among others. Every objective evaluation was (over-)turned, often for rhetorical purpose, into a subjective statement by the opposition in the political discourse in order to initiate a verbal attack. Evaluative words included *nuli* (努力) ‘with effort’, *butong* (不同) ‘different’, *tebie* (特別) ‘special’, *teshu* (特殊) ‘special’, *kunnan* (困難) ‘difficult’, *danxin* (擔心) ‘afraid’, *yange* (嚴格) ‘strict’, *shiji* (實際) ‘in reality’, *mingque* (明確) ‘clearly’, *zunzhong* (尊重) ‘respect’, *xiwang* (希望) ‘hope’, and *dique* (的確) ‘indeed’, an example of which is shown in (15) below:

- (15) → 155.1:a 政府非常的努力…  
‘The government has worked very hard...’  
155.1:b 院長同意他用這樣的方式來回答嗎?  
‘Does the dean agree with him to answer in this way?’

Pointing out something as special also often cued in others for interruptions, using words such as *butong* ‘different’, *tebie* ‘special’, and *teshu* ‘special’, as shown in (16) below:

- (16) → 6507:a 因為每個人在不同的時候有不同的身分，他必須要做符合他身分的事情，  
譬如說…  
‘Because everyone has a different identity at different times, he must do things  
that match his identity, such as...’  
6507:b 你可以保證在未來 8 年中，你不會採取制憲的角度，也不會把你學者的身  
分帶到這個地方嗎?  
‘Can you guarantee that in the next eight years, you will not adopt a  
constitutional perspective, nor will you bring your status as a scholar to this  
place?’

Value judgments about something being difficult and worrisome—such as *kunnan* (困難) ‘difficult’ and *danxin* (擔心) ‘afraid’—made up a small subgroup of subjective evaluations inviting interruptions, as shown in (17) below:

- (17) → 4271:a 如果許部長認為這中間有困難的話會跟我解釋，我們也不是每個任命都是…  
 ‘If Minister Xu thinks there are difficulties in the process, he will explain to me. Not every appointment is…’
- 4271:b 院長，你也不要害你的部屬，張兆順的名單一開始是他想出來的嗎？  
 ‘Dean, don’t hurt your subordinates either. Did Zhang Zhaoshun come up with the list at the beginning?’

## 5.2 Interrupting Sentences

Interrupting sentences were characterized as such because they disrupted a statement of an interactant. In comparing all the interrupting sentences, we observed certain recurrent features and referred to them as “interrupting-keywords.” The interrupting keywords were not limited to specific word classes. Since they appeared anywhere in a sentence, they were not understood as “causing the interruption,” but rather as linguistic patterns that were naturally preferred, or manifest, when a speaker realized the speech act of interruption.

### 5.2.1 Negation

Arguably, one of the most prominent functions of the interruptions was to disagree with an opponent. This was indicated by negative particles, such as *buyao* (不要) ‘do not’, *bu* (不) ‘no’, and *mei* (沒) ‘no, not’, among others. Direct negation of a verb, other than implicit negation, was the most frequent type, such as *fandui* (反對) ‘oppose’ and *kunnan* (困難) ‘difficult’. There were 297 instances of direct verb negation in the interrupting sentences, roughly one-third more than in the interrupted sentences (207). The words *buyao* (不要) ‘do not’, *buhui* (不會) ‘will not/cannot’, *buneng* (不能) ‘cannot’ and *buxing* (不行) ‘cannot’ also showed this tendency, but with a decreased contrast, which referred to opposite frequency shifts (increased vs. decreased) between the interrupted and the interrupting sentences. As such, negation was closely related to adversatives and opposition. Examples of this offensive discourse strategy are shown in (18) and (19) below:

- (18) 1499:a 我們來評估，那個部分…  
‘Let’s evaluate, that part…’  
→ 1499:b 你們不要評估了，你們已經評估很久了。  
‘You don’t need to evaluate it, you have been evaluating it for a long time.’
- (19) 4304:a 我們不能有…  
‘We can’t have…’  
→ 4304:b 難道你們不會適度告訴他們嗎？  
‘Wouldn’t you tell them in moderation?’

### 5.2.2 Adversatives and Opposition

Adversative words imply rejection, protest, or contrast of opinion, and in the context of the interpellations, they signaled the interrupter’s opposition. Words that fell into this group included *que* (卻) ‘yet, but’, *keshi* (可是) ‘but’, and *zhi* (只) ‘only’. In many cases, the burden of signaling opposition to something did not fall on these words alone but also relied on a “combined occurrence,” in which the discourse function of an utterance (i.e., showing opposition) was fulfilled by a set of words that all occurred together in the same sentence. This category included *que* (卻) ‘yet, but’, *keshi* (可是) ‘but’, *zhi* (只) ‘only’, *xin* (新) ‘new’, *jiu* (就) ‘(grammatical particle)’, and *zhiyao* (只要) ‘if only’, an example of which is shown in (20) below:

- (20) 8034:a 當然稅法和憲法的關係就是憲法第十九條，人民有依法律納稅之義務…  
‘Of course, the relationship between the tax law and the constitution is Article 19 of the constitution, and the people have the obligation to pay taxes in accordance with the law…’  
→ 8034:b 是，可是納稅的主體其實不是人民啊！  
‘Yes, but the taxpayers are not actually the people!’

### 5.2.3 Superlatives

Interruptions are considered a rhetorical device that indicates strong emotion, opposition, or involvement. Superlatives naturally support the sense of contrast and opposition. In this context, they have been discussed under the label “extreme case formulation” by Pomerantz (1986). We

observed many instances of superlatives in the interrupting sentences, using words such as *lian* (連) ‘even’, *zui* (最) ‘most’, *tai* (太) ‘too, most’, and *juedui* (絕對) ‘absolute(ly)’, among others. Examples of this offensive discourse strategy are shown in (21) and (22) below:

- (21) 8491:a 我的印象好像沒有，最多大概是類似用行政命令去…  
 ‘I don’t seem to have any impressions, at most it is probably similar to using administrative orders...’  
 → 8491:b 連行政命令都沒有!  
 ‘There are absolutely no administrative orders!’
- (22) 6986:a 這在台灣的話，…  
 ‘If this is in Taiwan,...’  
 → 6986:b 這個話題談太久了，其實我不是在質疑你的學術地位或法學素養。  
 ‘This topic has been talked for too long. Actually, I am not questioning your academic status or legal literacy.’

### 5.2.4 Questions

Out of the 1,089 interruption pairs, sentences that ended in a question mark were the most common category of the interrupting sentences (456 instances, 42%), closely followed by statements (442 instances, 41%). Interpellations are all about asking questions. Both real and rhetorical questions are powerful rhetorical devices. In the institutional discourse, questions were often used to perform the discourse functions of showing disrespect, power, and aggressive verbal attacks. This category included words such as *ma* (嗎) ‘MA-particle’, *ne* (呢) ‘NE-particle’, *weishenme* (為什麼) ‘why’, *weihe* (為何) ‘for what’, *na* (哪) ‘which’, *shenme* (什麼) ‘what’, *duoshao* (多少) ‘how much/many’, *haobuhao* (好不好) ‘all right?’, *nengbuneng* (能不能) ‘can (you)?’, and *huibuhui* (會不會) ‘would (you)?’. Yes/No questions ending in *ma* (嗎) were five times more common than questions ending in *ne* (呢), and they were responsible for a quarter of all the questions. An example of this offensive discourse strategy is shown in (24) below:

- (24) 2720:a 長照的部分因為跟原民會的部分有相關…  
 ‘Because the long-term care policy is related to the Council of Indigenous Peoples...’

- 2720:b 我們今天沒有特別邀請，以後我們再弄一個專案報告好嗎?  
'We have no special invitation today. We do another project report in the future, alright?'

Questions formed with *haobuhao*, *nengbuneng*, and *huibuhui* were more often related to disrespect and showing power, as shown in (25) below:

- (25) 1671:a 我會誤會呂委員是因人設事來改制度，這是不好的，一個制度要去改是因為...  
'I would misunderstand that Commissioner Lu changed the system because of the establishment of personnel. This is not good. A system needs to be changed because...'
- 1671:b 我是在野黨的，你如果不敢說，怕影響黨內的和諧，我幫你提，好不好?  
'I'm from the opposition party, if you dare not say it, for fear of affecting the harmony within the party, I'll help you mention it, okay?'

### 5.2.5 Direct Address

In the interrupting sentences, we often observed certain personal pronouns used to directly address the opposing party. More often, the interrupter called the addressee by his or her professional title (i.e., *buzhang* (部長) 'minister' and *yuanzhang* (院長) 'dean'). This category also included words such as *ni* (你們) 'you', *nimen* (你們) 'you' (pl.), and *zhuwei* (主委) 'chairman'. Examples of this offensive strategy are shown in (26) and (27) below:

- (26) 7375:a 對於這個問題，其實我們的社會已經討論很多了，個人覺得我的看法如何其實已經不是那麼的重要，我個人的選擇...  
'In fact, our society has already discussed this issue a lot. I personally feel that my opinion is not so important anymore. My personal choice...'
- 7375:b 你個人的選擇是什麼?  
'What are your personal choices?'
- (27) 3907:a 以後我們不要發生這種情況，這是沒有錯，但是...  
'Let's make sure that it won't happen again in the future, it is not wrong, but...'
- 3907:b 院長，人要誠實，我所認識的林全，不是像你這樣在耍嘴皮子的。

Dean, people have to be honest. The Lin Quan I know is not playing tricks like you.’

## 6. Summary and Conclusion

Institutional discourse differs from other types of communication in that its incentive structure is clearly defined as confrontational, and it rewards aggressive linguistic behavior, which is categorized by forms of defensive and offensive discourse strategies and is associated with certain linguistic patterns at both the parts-of-speech level and the semantic-patterns level. As the corpus-based analysis has shown, both levels reflected strategies of interruptions. In contrast to interruptions in other settings, which can be explained by cues and speech markers, the interruptions during the political interpellations in the current study were not invited or semi-planned. Rather, the interruptions happened in an incentive structure that rewarded the exploitation of the opponent’s weaknesses in his or her argument or presentation. Expressions related to self-reference, a reasonable presentation of an argument, pseudo-objectivism, displays of confidence, or any word that could be interpreted as having a subjective viewpoint are common categories of interrupted sentences. From the perspective of the opponent, these categories represent weakness and invite interrupting attacks. Each of these construed weak points has been statistically associated with increased or decreased frequency shifts in the keywords and semantically with discourse functions.

In the interruptions, pronouns, conjunctions, and adverbs were overrepresented, given their numbers in the overall corpus. Within the entire corpus, pronouns made up less than 1%, but they represented 10% of all the statistically significant keywords of interruption. In terms of conjunctions, they made up around 1% and represented 9% of the keywords. For adverbs, they made up 5% and represented 22% of the keywords. Conversely, nouns, verbs, and adjectives were underrepresented. Nouns comprised the largest group in the entire corpus (51%) but contributed only about 29% to the keywords. Verbs accounted for 40% in the corpus but only 18% of the keywords were verbs. Adjectives played no role at all (about 1%)—not a single adjective was a keyword.

Statistics can explain the frequency effects only to a certain degree. The more interesting question is, why were discourse function words such as conjunctions not equally distributed across sentence types, but in fact, showed significant differences? Moreover, to what degree were conjunctions, pronouns, and adverbs, as well as some nouns and verbs, related to discourse strategies? These questions required a second tier of analysis.

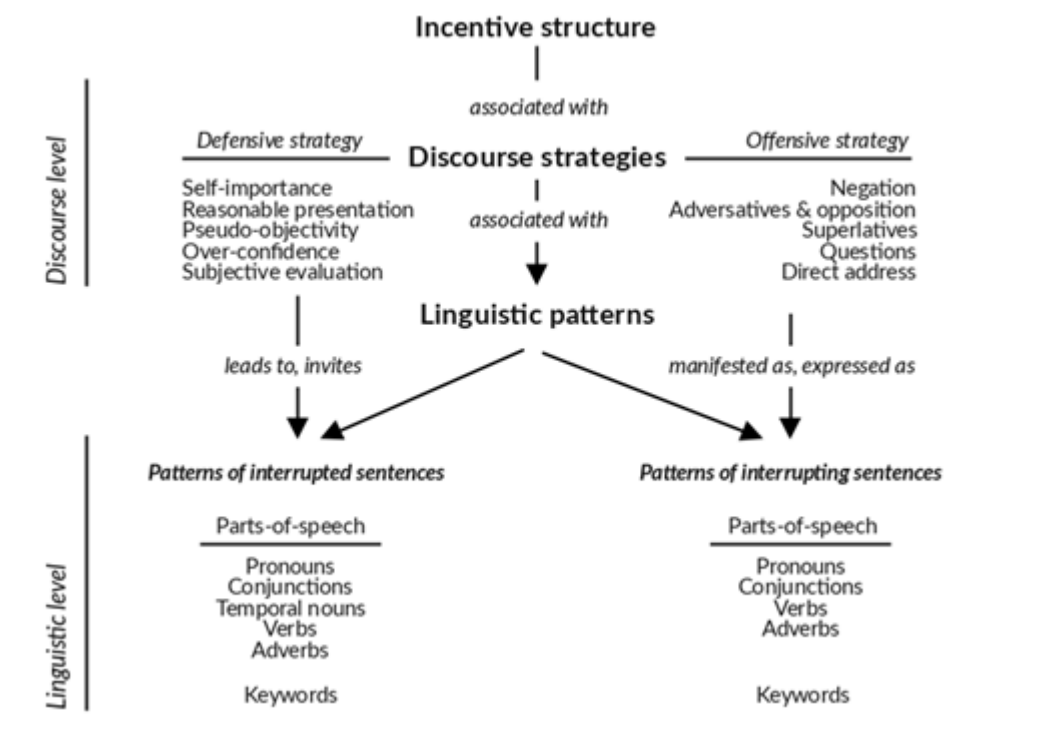
In this second step, we used the incentive structure in order to explain the shifts in frequencies. We differentiated between offensive discourse strategies, which tended to be more

associated with interrupting sentences, and defensive discourse strategies, which were more associated with interrupted sentences.

Important words discussed in this study were the keywords in the interrupted sentences, which were often related to downtoners and expressed pseudo-objectivity, such as *muqian* (目前) ‘currently’, *qishi* (其實) ‘actually’, *keneng* (可能) ‘possibly’, and *bijiao* (比較) ‘comparatively’; to over-confidence, such as *dangran* (當然) ‘of course’ and *yiding* (一定) ‘definitely’; to nouns, such as *shishi* (事實) ‘fact’; to verbs that mainly had discourse functions, such as *jiang* (講) ‘talk’; to express subjective evaluation, such as *xiwang* (希望) ‘hope’; and to self-reference, making excessive use of first-person pronouns, such as *wo* (我) ‘I, me’ and *women* (我們) ‘we, us’. Conjunctions also appeared significantly more often in the interrupted sentences, especially when introducing subclauses that indicated reason or counterfactuals, such as *yinwei* (因為) ‘because’, *suoyi* (所以) ‘therefore’, *ruguo* (如果) ‘if’, and *danshi* (但是) ‘but’.

In the interrupting sentences, on the other hand, the higher-frequency keywords were second-person pronouns that were used to directly attack an opponent, such as *ni* (你) ‘you (sg.)’ and *nimen* (你們) ‘you (pl.)’, and adverbs related to counter-attack pseudo-objectification, such as *xinzai* (現在) ‘now’, in opposition to *muqian* (目前) ‘currently’. Words that indicated opposition or negation were particularly prevalent in the interrupting sentences, such as *buyao* (不要) ‘do not’, *bu* (不) ‘not’, and *meiyou* (沒有) ‘do not have’. These words were also related to speech acts in general, such as *wen* (問) ‘ask’ and *huida* (回答) ‘answer’, and to words that indicated a conclusion, mostly *suoyi* (所以) ‘therefore’. These examples demonstrate that the keywords were organized by semantic fields and were related to discourse functions.

Taken together, interruptions in institutional discourse can be explained, at least partially, by frequency patterns and semantic patterns embedded in a competitive incentive structure. Interruptions are a multi-layered phenomenon that works at different levels simultaneously, as illustrated in Figure 5 below:



**Figure 5. Discourse and linguistic levels of interruption**

This paper mainly focused on depicting the keywords involved in interruptions during parliamentary discourse. However, interruptions are a complex linguistic phenomenon. Other underlying mechanisms, such as the effect of different stances of the interlocutors, the intentions of the interlocutors, and even the existence of interruptive constructions, are also intriguing topics. Indeed, they are beyond the scope of this paper, so we will leave those topics for future studies.

### Acknowledgments

We would like to express our sincere gratitude to the two anonymous reviewers for their constructive comments that helped improve the quality of the previous manuscript. We also would like to thank Andrew H.C. Chuang for the first proofreading and Prof. Siaw-Fong Chung for her inspiring inputs and support for this publication.

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### **Appendix A. Supplementary material**

The keyword list of this study is available via the following link:  
<https://www.space.ntu.edu.tw/navigate/s/462D30BB20BF4E8B826F0610FE6C3052QQY>