## University of Pardubice

Faculty of Arts and Philosophy

The Use of Infinitives in Academic and Newspaper Discourse Diploma Thesis

Univerzita Pardubice

Fakulta filozofická
Akademický rok: 2020/2021

# ZADÁNÍ DIPLOMOVÉ PRÁCE 

## (projektu, uměleckého díla, uměleckého výkonu)

Jméno a přjjmení:
Osobní číslo:
Studijní program:
Téma práce:
Zadávající katedra:

Bc. Jakub Gregor<br>H21343<br>N0231A090011 Anglická filologie<br>The Use of Infinitives in Academic and Newspaper Discourse<br>Katedra anglistiky a amerikanistiky

## Zásady pro vypracování

Cilem diplomové práce je prostudovat užití infinitivu v akademickém a novinovém diskurzu. Student nejprve představí funkce a distinktivní jazykové prostředky akademického i novinového diskurzu a shrne hlavní odlišnosti v rovině syntaktické. Dále na základě studia relevantní odborné literatury z oblasti lingvistiky vysvětlí rozdil mezi finitním a nefinitním slovesným tvarem, vymezí pojem infinitiv, podrobně popíše jeho formy, syntaktické funkce a uplatnění v syntaktické kondenzaci anglické větné stavby. Následně provede analýzu sebraného korpusu textủ vědeckého a žurnalistického stylu s cilem zmapovat frekvenci výskytu infinitivních konstrukcí v rủzných syntaktických funkcích a zhodnotit jejich užití v závislosti na kontextu. Závěrem student shrne podobnosti a odlišnosti v užit́́ infinitivu v akademickém a novinovém diskurzu a objasní převažujicí tendence s ohledem na funkce analyzovaných textủ.

Rozsah pracovní zprávy:
Rozsah grafických prací:
Forma zpracování diplomové práce: tištěná/elektronická Jazyk zpracování:

## Angličtina

Seznam doporučené literatury:<br>Bednarek, Monika, and Helen Caple. 2012. News Discourse. London: Continuum.<br>Biber, Douglas, Stig Johansson, Geoffrey Leech, Susan Conrad, and Edward Finegan. 1999. Longman Grammar of Written and Spoken English. Harlow: Pearson Education Ltd.<br>Biber, Douglas, and Susan Conrad. 2009. Register, Genre, and Style. New York: Cambridge University Press.<br>Crystal, David, and Derek Davy. 1969. Investigating English Style. New York: Longman Group Ltd.<br>Duffley, Patrick. 2003. "The Gerund and the to-Infinitive as Subject." Journal of English Linguistics 31 (4): 324-352.<br>Girard, Geneviève, and Naomi Kalan. 1999. "Postmodification by infinitive clauses. Something about which to have a bit of a discussion." Anglophonia 3 (6): 31-42.<br>Huddleston, Rodney, and Geoffrey K. Pullum. 2002. The Cambridge Grammar of the English Language. New York City: Cambridge University Press.<br>Hyland, Ken. 2011. "Academic Discourse." In Continuum Companion to Discourse Analysis, edited by Ken Hyland and Brian Paltridge, 171-184. London: Continuum.<br>Leech, Geoffrey, and Jan Svartvik. 1975. A Communicative Grammar of English. Harlow: Longman Group Ltd.<br>Quirk, Randolph, Sidney Greenbaum, Geoffrey Leech, and Jan Svartvik. 1985. A Comprehensive Grammar of the English Language. New York: Longman Group Ltd.

| Vedoucí diplomové práce: | PhDr. Petra Huschová, Ph.D. <br> Katedra anglistiky a amerikanistiky |
| :--- | :--- |
| Datum zadání diplomové práce: | 2. dubna 2021 |
| Termín odevzdání diplomové práce: | 0. bréena 2022 |

doc. Mgr. Jirǐi Kubeš, Ph.D. v.r.
dêkan

Mgr. Olga Roebuck, Ph.D. v.r.
vedouci katedry

## Prohlašuji:

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## Annotation

This diploma thesis focuses on the analysis of to-infinitive structures in academic and newspaper discourse. The theoretical part of this work first defines the main functions and linguistic features of the two discourse types, then briefly addresses the differences between finite and non-finite verbs, and lastly describes the infinitive in detail, with special focus on the many different clausal constructions it may be part of. The practical part then analyzes data found in authentic academic and newspaper texts and tries to explain the prevailing tendencies in relation to discourse type. The main goal of the analysis is to find out which of the two corpora the use of infinitives is more common in and why.

## Key words

infinitive, non-finite verbs, academic discourse, newspaper discourse, written language

## Název práce

Používání infinitivů v akademickém a novinovém diskurzu

## Anotace

Tato diplomová práce se zaměřuje na analýzu klasického anglického infinitivu s částicí „to" v akademickém a novinovém diskurzu. V teoretické části této práce jsou nejdříve vydefinovány hlavní funkce a jazykové rysy těchto dvou typů diskurzu, poté jsou krátce zmíněny rozdíly mezi finitními a nefinitními slovesnými tvary, a nakonec je detailně popsán infinitiv, prričemž je většina prostoru věnována mnohým větným konstrukcím, jejichž součástí je právě sloveso v infinitivu. V praktické části jsou poté analyzována autentická data z akademických a novinových článků a převažující tendence jsou objasněny v kontextu jednotlivých diskurzů. Hlavním cílem analýzy je zjistit, ve kterém korpusu se infinitivy objevují častěji a proč.

## Klíčová slova

infinitiv, nefinitní slovesa, akademický diskurz, novinový diskurz, psaný jazyk

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## List of abbreviations

AAP - adverbial adjunct of purpose
AAR - adverbial adjunct of temporal result
AC - adverbial conjunct
AD - adverbial disjunct
CAT - catenative complement
CC - comparative clause
CTC - complex-transitive complement
IND - indeterminate
NCS - nominal subject clause
$\mathrm{NCS}_{\mathrm{E}}$ - extraposed nominal subject clause
NCO - nominal object clause
NCO* - nominal object clause with a prepositional paraphrase
$\mathrm{NCO}_{\mathrm{E}}$ - extraposed nominal object clause
NCCs - nominal subject complement clause
$\mathrm{NCC}_{\mathrm{A}}$ - nominal adjective complement clause
PC - prepositional complement
$\mathrm{PM}^{*}$ - indeterminate post-modifier
PMA - appositive post-modifier
PMR - relative post-modifier

## Introduction

This diploma thesis deals with analyzing the use of to-infinitive constructions within academic and newspaper writing and aims at explaining the prevailing tendencies. For these purposes, both academic and newspaper texts were taken off online sources. For the analysis to be as even and comprehensive as possible, it was decided that there shall be an equal number of texts from either corpus included in the overall data and only texts of relatively similar lengths were selected. This means that the academic corpus consists of essays, journal articles and research papers, while the newspaper data comes from news reports. Overall, twenty authentic pieces of writing were analyzed, ten of each discourse type.

This thesis has been divided into a theoretical and a practical part. In chapter 1 of the theoretical section, the main functions and linguistic features of both academic and newspaper discourse are defined. Chapter 2 then focuses on describing the differences between finite and non-finite verbs, with sub-chapters 2.1-2.3 briefly addressing non-finite participial and gerund forms. Finally, it is in chapter 3 that the infinitive is discussed in detail, with attention given to its morphological features, condensing function and the bare/to-infinitive dichotomy. Subchapters 3.1-3.6 then observe in detail the six major categories of clausal constructions the toinfinitive may appear in.

The theoretical background described in the first three chapters of this thesis is then used for the analysis conducted in the practical part. First, the overall results are summarized in chapter 4.1, with the differences in use between academic and newspapers discourse briefly highlighted. The sub-chapters 4.1.1-4.1.8 then focuses on the clausal categories defined in the theoretical section and the division of the collected to-infinitive clauses based on this classification. The overarching tendencies are observed and explained within the context of academic and newspaper discourse. Chapter 4.2 then serves as a summary of the major findings. The main goal of the analysis is to find out which discourse type the infinitive constructions appear more frequently in and why.

## 1. Academic vs. newspaper discourse

As this thesis deals with the analysis of infinitives in academic and newspaper discourse, it is essential the stylistic features of both these registers be defined first. Chapters 1.1 and 1.2 of this thesis will outline the main functions and most common and important linguistic features of academic and newspaper discourse respectively.

### 1.1 Academic discourse

When using the term "academic discourse," one must be aware that it does not merely refer to texts produced in academia. Therefore, it is not only theses, dissertations, textbooks, essays, and other written forms of academic language that comprise this discourse type, but also lectures, seminars, conference presentation, and other spoken, or hybrid, genres that occur in academic settings. (Hyland 2009, 1; Hyland 2011, 171) Because this thesis focuses on the analysis of written language, the term "academic discourse" will be used in this work to refer solely to academic writing.

Biber et al. (1999, 15-16) define written academic discourse as a specific register, i.e., a type of language variety that has unique production circumstances and communicative purposes. They compare it with fiction and newspaper writing in that all these written registers seem to share certain characteristics, e.g., the fact that they are not directly interactive and are not focused on developing a relationship between the writer and his readers (Biber et al. 1999, 1516). Additionally, the three registers are produced under the same circumstances, with a lot of time to plan, revise and edit the piece of writing (Biber and Conrad 2009, 113). Where academic discourse differs is in its intended audience, which is generally international, therefore one would not expect dialectal features to have any effect on the final product (Biber et al. 1999, 16).

It is also true that the language of academia is more elevated when compared with other written registers, and exponentially so when compared with speech (Biber et al. 1999, 16). In the past, academic discourse was seen as reflecting an objective view of the world (Hyland 2011, 173). This has shifted now, but the language used remains very formal. Students often struggle with learning how to produce academic language because of its unique conventions (Hyland 2009, 5-7). It could be hypothesized that the perpetuation of the prestigious and elevated nature of academic texts is a result of the expected audience, which consists of professionals in a particular field of study, who are already familiar with the concepts discussed in the writing,
therefore there is no need to use everyday vocabulary to be more explicit for people with no prior knowledge of the subject-matter (Biber et al. 1999, 16; Biber and Conrad 2009, 113)

Interestingly, because academic discourse is written for both a specialist and a global audience, English has essentially become the lingua franca of academia all over the world. It is now very uncommon for academic professionals to write in their native tongue, producing texts in English in order to broaden their target audience. Incidentally, this has led to the lowering of the prestigious level of academic language as non-native speakers of English have trouble adhering to its conventions and grammatical-syntactical rules. (Hyland 2011, 173-81)

Biber et al. $(1999,16)$ propose that the main function of academic discourse is to provide the reader with information. Biber and Conrad $(2009 ; 113)$ agree with this and stress that the content needs to be factual, not imaginative, and that expressions of stance should not be particularly overt. It is, however, essential that the author of an academic text does not merely present information, but that they interpret and make conclusions from the data as well (Biber and Conrad 2009, 113). Specific topical focus of academic discourse cannot be defined due to two factors. Firstly, academic writing is not a monolith and consists of many different genres that have varying communicative purposes (Biber and Conrad 2009, 114; Crystal and Davy 1969, 251; Hyland 2009, 67-97). Secondly, topics differ based on the field of study (Biber and Conrad 2009, 114).

Another important thing to consider when analyzing academic discourse is that it involves interpreting data posed by other authors through the use of citations. What this means is that an academic text contains references to other works, the function of which is to show how the new text relies on the understanding and knowledge of previous research in the specific field of study. This helps establish the writer as an insider, i.e., somebody who has inside knowledge of the subject-matter and is thus entitled to speak on it. (Hyland 2009, 10-11; Hyland 2011, 182) It is often essential for the author to provide readers with several different interpretations of and views on the subject-matter at hand and then position themselves within the myriad of knowledge by evaluating the numerous viewpoints, adopting one of them and providing an explanation for their selection (Hyland 2011, 177). This also means that the author has to be able to argue their claims efficiently and persuade the reader that their interpretation of the data is sufficient and that the end-product has scientific merit and adds to the already existing body of knowledge (Hyland 2009, 10-11; Hyland 2011, 173-74).

As mentioned already, there are certain conventions that academic texts have to adhere to. It is, however, necessary to stress that these tendencies evolve and change through time and also differ from one language to the next one. In general, though, we expect academic writing to be explicit about its own structure and purpose. The author repeatedly reminds the reader about what the purpose of their work is, and they very frequently either preview or review what the preceding/upcoming section of the text entails. The use of citations discussed in the previous two paragraphs is also a convention typical of academic discourse. Authors tend to use as recent literature as possible so that the information included is viewed as relevant, not outdated. The third characteristic of academic writing that needs to be mentioned is the use of mitigation techniques and hedging. This refers to linguistic devices (e.g., probably, might or possible) which indicate that the information at hand should be seen as plausible reasoning rather than factual evidence. Hedging allows the author to withhold their commitment to propositions, acknowledging the possibility of alternative interpretations. Lastly, academic discourse tends to rely on cohesive devices, such as linking adverbials, to explicitly highlight the structure of the text so that it is easier for the reader to follow. (Hyland 2011, 179-81)

Crystal and Davy $(1969,251)$ stress that academics need to structure their texts as clearly and precisely as possible in order for the progression of ideas to be logical. Cohesive devices, mentioned in the preceding paragraph, are one way of achieving this. Visual presentation also plays an important cohesive role, with the use of sub-headings, paragraphs, and different stylistic devices such as bold letters or cursive contributing to the logical structuring of an article (Crystal and Davy 1969, 251).

Biber and Conrad (2009, 114-18) agree that academic discourse relies heavily on precision and state that this is the main reason for the high frequency of complex noun phrases in academic writing. They go on to add that it is not uncommon for a noun to be pre-modified and postmodified by multiple elements such as adjectives or prepositional phrases, which help define the key concepts of the text in as detailed and specific ways as possible (Biber and Conrad 2009, 114-18). Finally, they mention that sentences in academic works typically contain multiple complex noun phrases but only one verb phrase, with the high density of nominal constructions being one of the most prominent features of academic discourse (Biber ad Conrad 2009, 11418).

Associated with the specificity of noun phrases is the complexity of vocabulary used (Crystal and Davy 1969, 251). Biber and Conrad $(2009,118)$ stress that academic writing has a high "type-token ratio," a term that refers to the number of different words used in a text. This means
that the vocabulary in academic discourse is very broad, often relying on the use of synonyms so that the same word is not repeated too much throughout the text. Both this and the nominal features described above contribute to the overall complexity of sentences in academic writing. Biber and Conrad $(2009,118)$ propose that the complex syntax is a direct result of the production circumstances where authors have enough time to plan, revise and edit their texts and thus come up with extremely well-formed sentences.

The language used in academic writing tends to be impersonal and abstract (Crystal and Davy $1969,251)$. That is why Biber and Conrad $(2009,114)$ propose that the use of personal pronouns is extremely uncommon in the language of academia. On the other hand, Hyland (2009, 76-77) states that while the author should try to distance themselves from their writing, using personal pronouns may in some cases be a stylistic choice applied to achieve a particular effect. For example, the use of "I" may help the author express their stance on arguments, while using the inclusive "we" may indicate the reader's involvement as somebody with insider knowledge, which might help the author get the reader on their side (Hyland 2009, 76-77).

Lastly, the verbal features of academic discourse shall briefly be addressed. Biber and Conrad (2009, 118-21) argue that academics tend to use present tense in most cases, the past tense being rather infrequent. They propose this is because information presented in academic texts should seem as relevant and as current as possible (Biber and Conrad 2009, 118-21). Additionally, present tense allows authors to be general in their statements, contributing to the impersonality and abstractness of academic writing (Biber and Conrad 2009, 118-21).

The use of passive voice is also an essential feature of academic discourse. Biber and Conrad (2009, 122-23) claim that it is mainly in reporting the findings of a research that authors employ passive constructions. When the subject of the active sentence would be a group of researchers or a singular researcher, the passive proves more economical while retaining the same amount of information (Biber and Conrad 2009, 122-23). Additionally, the use of passive allows for key concepts that would be objects in active sentences to be made the subject, making the topical focus of the sentence clear (Biber and Conrad 2009, 122-23).

### 1.2 Newspaper discourse

The term newspaper discourse refers to a generally broad set of texts, as anything within a newspaper, and other types of public media, is essentially part of this register. This chapter will first briefly discuss the main functions of news writing and then address the typical linguistic features of newspaper discourse. Before describing news writing in detail, however, it is
important to note that while the focus of this thesis will be on written texts, the term "newspaper discourse" encompasses much more than that. Montgomery $(2011,213)$ stresses that spoken language of news broadcasts also falls under this heading. Bednarek and Caple (2012, 2) additionally propose that anything that appears on television, radio, or even online and follows the general production circumstances of newspaper writing may also be considered newspaper discourse. However, as this thesis focuses on analyzing newspaper writing, the term "newspaper discourse" will be used to refer solely to written language.

Crystal and Davy $(1969,171)$ declare that the main function of a newspaper is to inform. Biber and Conrad $(2009,109)$ expand on this idea by stating that the goal of a journalist should be to provide the reader with information, not to develop a personal relationship with them. They compare this with spoken language where the main focus is on creating rapport with the other interlocutor, which they claim is extremely uncommon in the case of newspaper articles where the reader is not privy to such basic information as the author's name, let alone any personal details about them (Biber and Conrad 2009, 109).

Although the development of an interpersonal relationship between the writer and their readers is unlikely, Richardson argues that journalists write their articles with an intended audience in mind, meaning there is some sort of a connection between the author and the addressees (2007, 89-93). The distance between the reader and the writer arises from the fact that newspaper articles are written for undifferentiated masses of people, which effectively renders the development of any personal bonds impossible (Van Dijk 1988, 74). (Gregor 2021, 26)

Similarly to academic discourse, the author of a newspaper article typically has time to edit and review their writing (Biber and Conrad 2009, 109). Not only that, but the author can usually plan what they are going to write ahead of time. In contrast, speech typically does not allow for such planning and is almost always produced spontaneously in the spur of the moment (Biber and Conrad 2009, 109). At the same time, newspaper writing is unique in that there is some level of haste involved in its production as journalists have to work with very tight deadlines, allowing them only limited time for editing and revision (Biber and Conrad 2009, 113).

Newspapers typically focus on reporting current or recent newsworthy events (Biber and Conrad 2009, 113-14). What is considered "newsworthy" depends on a number of attributes called "news values." Bednarek and Caple (2012, 39-83) dedicate an entire chapter to defining these key concepts of newspaper writing. However, as there is not enough space or need to do the same in this thesis, the basic idea formulated by Montgomery (2011) will have to do.

According to him, for an event to be newsworthy, it has to have happened recently, it must be of importance to the general public, and it has to be culturally relevant or have some sort of lasting effect on the lives of people (Montgomery 2011, 214). Additionally, bad news is more newsworthy than good news and articles about powerful, well-known individuals will attract more readers than those about everyday people (Montgomery 2011, 214).

Much like in academic writing, information presented in a news article is typically attributed to external sources. However, unlike the precise citing conventions one must follow when writing an academic text, the sources in newspaper writing are commonly acknowledged in very vague ways. Information can either be left entirely unattributed, with no mention of who or where it came from, or it may be attributed to a source using allegedly or according to. The source may be specified or replaced with a general noun phrase such as a source close to the court or court documents. (Bednarek and Caple 2012, 90-91; Biber and Conrad 2009, 122)

Having defined the basic functions and features of newspaper discourse, it is now time to turn to the linguistic side of things. Crystal and Davy (1969, 173-74) state that the language of newspapers is often uniformly referred to as "journalese." This term has no clear-cut meaning because it encompasses all language that appears within a newspaper, from reports to advertisements. Therefore, Crystal and Davy (1969, 173-74) propose that rather than using "journalese" as a comprehensive term generalizing the language of newspapers as a set of shared features, it should be seen as a composite of many different linguistic materials.

One of the most significant factors influencing the language used in newspapers is that of syntactic condensation. Journalists often have to compress large amounts of information into minimal amounts of space. That is why the general body of a news report is typically divided into extremely short paragraphs that frequently consist of only one or two sentences. An argument could be made that the reason for the high frequency of short paragraphs in newspaper articles is that their presence makes the text much easier to read. (Crystal and Davy 1969, 17478; Gregor 2021, 27; Stofer, Schaffer and Rosenthal 2010, 110)

When talking about syntactic compression, one must also talk about headlines. Because they should contain a clear, concise message of what the rest of the text is about, headlines typically consist of incomplete sentences, with several words omitted. The main goal of a headline is to attract the reader and persuade them that the article is worth reading. That is why headlines are commonly highlighted by being in bold letters or having a different-sized font from the rest of
the text. The highlighting of a headline gives it an eye-catching quality that is sure to capture the reader's attention. (Bednarek and Caple 2012, 96-97; Crystal and Davy 1969, 174-77)

Despite frequent syntactic compression, both Crystal and Davy (1969, 182-83) and Biber and Conrad $(2009,118)$ agree that the syntax of newspaper writing tends to be relatively complex, with lots of subordination and coordination. Van Dijk (1988, 77-80) says that the complexity of the syntax has a lot to do with syntactic compression as well. It may seem like kind of a paradox that the creation of longer sentences allows for the text to be shorter. However, many of the subordinate clauses are non-finite, frequently subjectless, allowing for the omission of several clausal elements. This results in complex, well-formed sentences with lots of condensed information (Crystal and Davy 1969, 183).

As with academic writing, nouns and noun phrases are also extremely common in newspaper discourse. In fact, there is very little difference between the two discourse types as far as nominal features are concerned. Nouns in newspaper writing also tend to be pre- and postmodified by other elements, such as adjectives or prepositional phrases, to ensure that the concepts brought up are defined as precisely as possible. On the other hand, the use of modification and nominalization ${ }^{1}$ is also a means of compression, condensing a lot of information into one phrase. Finally, personal pronouns are more frequent than in academic discourse, although still relatively rare. (Bednarek and Caple 2012, 85-87; Biber and Conrad 2009, 114-18; Crystal and Davy 1969, 186-87)

When it comes to verbal features, one may observe slight differences between newspaper and academic writing. As far as tenses are concerned, Bednarek and Caple $(2012,87)$ propose that present tense is more frequent than past tense, while Biber and Conrad $(2099,199)$ argue that the frequency of the two tenses is about the same. In any case, using past tense is far more common in newspaper discourse than in academic texts. This is because journalists commonly report on events that happened in the past, albeit a very recent past (Biber and Conrad 2009, 119). Although still infrequent, modal verbs occur more in news writing than in academic discourse (Bednarek and Caple 2012, 87). Finally, while the passive is not as common in newspaper articles as it is in academic writing, when it is used, it is typically in cases where the agent is unknown or irrelevant (Bednarek and Caple 2012, 88-89; Biber and Conrad 2009, 123).

[^0]Lastly, it must be stated here that newspaper and academic discourse differ in the use of adverbials. While academic writing shows a prevalence of linking adverbials, these are very uncommon in the language of newspaper reporting. Using linking adverbials to make relations between parts of the text explicit is redundant. This is because texts published in newspapers are structured so that the reader is able to infer these connections in other ways. Time and place adverbials are very frequent in newspaper writing. They take on the role of linking adverbials, providing the temporal and physical setting for the event in the main clause and in turn helping the author establish a logical sequence of events. (Bednarek and Caple 2012, 89; Biber and Conrad 2009, 119)

## 2. Finite vs. non-finite verbs

Having discussed the typical features of the two discourse types analyzed in the practical part of this thesis, focus shall now shift to the infinitive. Being a non-finite form, however, one must first consider the differences between finite and non-finite verbs. That will be the focus of this chapter, to briefly contrast the verb forms typically called "finite" and "non-finite," with chapters 2.1, 2.2 and 2.3 addressing specific non-finite constructions in more detail. The infinitive, as the focal point of this thesis, will not be discussed here (see chapter 3).

English verbs typically have five morphological forms: the base form (stay), the -s form (stays), the past form (stayed), the -ed participle (stayed), and the -ing form (staying). The -s form and the past form are finite verb forms, while the -ed and -ing forms are non-finite. The base form, depending on the construction it is part of, can be either finite or non-finite. (Quirk et al. 1985, 96-97; Greenbaum 1996, 117)

What the term "finite verb" refers to are verb forms which are marked for grammatical categories such as person, number, tense, or mood (Quirk et al. 1985, 149-151). If we take the form stays as an example, the verb shows markedness for person (3rd person), number (singular), tense (present tense) and mood (indicative). According to Declerck, Reed and Cappelle (2006, 15), "finite" means "limited." Therefore, we can say that the $-s$ form, for instance, is limited in its use to 3rd person singular indicative verbs in present tense.

On the other hand, non-finite verbs are unmarked for any of the grammatical categories described above (Quirk et al. 1985, 149-151). What this means is that their use is unlimited, i.e., they can be used for any person, number, tense, or mood without changing their form. If we take, for example, the verb form staying, it is impossible to identify person, number, tense,
or mood, unless we look at the wider context in which the verb is used, because the -ing form is entirely unmarked for these categories.

The differences between finite and non-finite verb forms may be extrapolated onto verb phrases. In the case of simple verb phrases, because the entire phrase is made up of only one verb, if the verb is finite, so is the whole verb phrase. In complex verb phrases, if the first verb is finite (e.g., was running), the entire phrase is considered finite. However, it is important to stress that only the first verb in a finite complex verb phrase is finite, the rest of the verbs are always nonfinite. This means that in the verb phrase was running, the verb running is still non-finite, even though it is part of a finite phrase. Logically, non-finite complex verb phrases contain only nonfinite verb forms (e.g., having done). (Quirk et al. 1985, 149-51; Greenbaum 1996, 251-53; Greenbaum and Nelson 2002, 61)

Interestingly, even though non-finite phrases are unmarked for person, number, tense, or mood, they may show markedness in terms of aspect (Biber et al. 1999, 100; Greenbaum 1996, 27578). The verb phrase having done in example [1a] is marked for the perfective aspect, while phrases such as the one in example [1b] are marked for progressive aspect.
[1] [a] Funnily enough, many patients who show such learning consequently deny ever having done the task before! (Greenbaum 1996, 275)
[b] Commenting on the time of the two reports, Mr. Kreindler said that they had surfaced just as his group were gathering critical evidence (Greenbaum 1996, 277)

Greenbaum (1996, 275-77) proposes that perfective aspect conveys the meaning of a preceding event, while progressive aspect carries the meaning of simultaneity. If we look at the sentence in example [1a], it is clear that the non-finite phrase having done refers to something that happened before the events in the matrix clause took place. Similarly, the progressive aspect present in [1b] alludes to the act of commenting happening simultaneously with the event in the main clause.

This touches up on another important difference between finite and non-finite verbs, one relating to their use in syntax. While finite verb phrases may function as the predicate of both independent and subordinate clauses, non-finite verb phrases may only function as the predicate in subordinate constructions (Biber et al. 199, 100; Greenbaum 1996, 252-53). We can use the sentence in [1b] to illustrate this fact. The non-finite verb phrase commenting introduces and is the predicate of the subordinate, or dependent, clause. Because the clause contains a non-finite
verb phrase, it is itself called non-finite. On the other hand, the finite verb phrase said is the predicate of the independent main clause, while the finite verb phrases had surfaced and were gathering function as the predicate in finite subordinate clauses. Independent clauses can only be finite, meaning they can never contain a non-finite verb phrase, as these can only appear in subordinate constructions (Quirk et al. 1985, 150).

In general, we may identify five different non-finite verb forms: the -ed participle, the -ing participle, the gerund, the bare infinitive, and the to-infinitive. Sub-chapters 2.1, 2.2 and 2.3 will focus on addressing the first three forms mentioned, while the infinitives will be dealt in more detail in chapter 3 of this thesis.

## 2.1 -ed participle

The -ed participle, sometimes also called past participle, is a non-finite verb form most frequently created by adding the -ed suffix to the base form of a verb, meaning it is the same as the past form. However, in the case of irregular verbs, the past and participle forms have different endings than the suffix -ed, and their forms may be the same, but they may also differ. (Quirk et al. 1985, 96-103; Eastwood 1994, 167-68) Example [2] illustrates the -ed participle form of a regular and irregular verb respectively.
[2] [a] She was injured in an accident. (Leech and Svartvik 1975, 224)
[b] They found her hidden by the kidnappers. (Leech and Svartvik 1975, 224)
As can be seen, injure is a regular verb, its past participle form ending with the -ed suffix. Hide, on the other hand, is irregular. Its part participial form contains the suffix -en, not -ed. Describing all the different suffixes available for the -ed participle is unnecessary. What is important, however, is to outline all the possible constructions the past participle can be part of. The -ed participle can form:
a) passive with be:
[3] Her brother is called John. (Quirk et al. 1985, 97)
b) perfect aspect with have:
[4] He has called twice today. (Quirk et al. 1985, 97)
c) participial clause:
[5] Called early, he ate a quick breakfast. (Quirk et al. 1985, 97)
d) participial adjective:
[6] He showed me a hurriedly written first draft. (Huddleston and Pullum 2002, 78)

Lastly, it should be mentioned that the past participle carries the inherent meaning of a preceding event. Declerck, Reed and Cappelle (2006, 17-18) claim that this anteriority is a general feature of the eed participle and it applies in all cases. We can thus surmise that in [3], the act of naming and calling the person John must have logically occurred before the utterance was spoken. Similarly, in [6], the letter had to have been written before it was shown to the speaker.

## 2.2 -ing participle

The -ing participle, frequently called the present participle, is in all cases formed by adding the -ing suffix to the base form of the verb. Thus, unlike with the past participle, there is no difference between regular and irregular verbs. (Quirk et al. 1985, 96-99; Eastwood 1994, 167$68)$. A present participle can be found in the example below.
[7] The train to Bath is now approaching Platform 3. (Huddleston and Pullum 2002, 80)

The -ing participle may form:
a) progressive aspect with be:
[8] He's calling her now. (Quirk et al. 1985, 97)
b) participial clause:
[9] Calling early, I found her at home. (Quirk et al. 1985, 97)
c) participial adjective:
[10] He threw it in the path of an approaching train. (Huddleston and Pullum 2002, 80)

Lastly, Declerck, Reed and Cappelle (2006, 17-18) propose that present participles carry an inherent meaning of simultaneity. Thus, we may infer that the act of calling in [8] is occurring at the same time as the speaker is uttering the words. Similarly, the participial clause in [9] implies that the event of finding the person at home happened in the exact moment that the speaker called the individual.

### 2.3 Gerund

The gerund is an interesting sub-category of non-finite verbs because most authors do not distinguish it from the -ing participle. In fact, only Huddleston and Pullum (2002) and Eastwood (1994) list is as a separate category. That is because in terms of form, the gerund is virtually unrecognizable from the present participle as it is also formed by adding the -ing suffix to the base form of the verb. The only difference is in their use. (Eastwood 1994, 159-60; Huddleston and Pullum 2002, 81-82) The gerund may only function as the following:
a) verbal noun
[11] I regret destroying the files. (Huddleston and Pullum 2002, 81)
Huddleston and Pullum $(2002,81)$ define a gerund as a verb with the -ing ending that functions as a noun or noun phrase. It has both verbal and nominal qualities in that while it itself functions as a noun, it still retains the ability to carry its own object (Eastwood 1994, 160; Huddleston and Pullum 2002, 81-82). This can be observed in example [11] where the gerund destroying functions as the direct object of the verb hate, while itself containing an object in the form of the noun phrase the files.

Deciding whether a verb in the -ing form is a participle or a gerund is sometimes impossible and Quirk et al. $(1985,1064)$ and Eastwood $(1994,160)$ even argue that it is unimportant. Huddleston and Pullum (2002, 81-83) agree with this and that is perhaps why they coined their own term, "gerund-participial," which functions as an umbrella term encompassing both -ing verb forms.

## 3. The infinitive

The analysis of to-infinitive clauses being the focal point of this thesis, the present chapter will be dedicated in its entirety to the non-finite verb from called the infinitive. First, the two types of infinitive construction, the to-infinitive and the bare infinitive, will be compared. The morphological features of both forms will then be discussed. Finally, the function of infinitive clauses as means of syntactic compression will be addressed. Because the analytical part of this thesis will focus solely on to-infinitival clauses, the sub-chapters $3.1-3.6$ will examine the different functional categories of to-infinitives in more detail. The practical analysis of the corpus data can then be found in chapter 4.

As mentioned previously, the infinitive is one of four non-finite verb forms in English and is formed using the base form of the verb. There are two types of infinitives: the to-infinitive and the bare infinitive. It can be inferred from the names of these two sub-types what their structure
looks like. The bare infinitive consists of the base form of the verb only, while the to-infinitive consists of the infinitive marker "to" followed by the base form. (Alexander 1988, 299; Eastwood 1994, 144-45; Greenbaum 1996, 119-20) The two clauses in example [12] illustrate a bare infinitive and a to-infinitive respectively.
[12] [a] He may call tonight. (Quirk et al. 1985, 97)
[b] We want her to call. (Quirk et al. 1985, 97)
In terms of morphology, the infinitive is not marked for tense, meaning the base form always remains unchanged with no inflections (Gu 2019, 3-5). Tense relations typically have to be inferred from linguistic context, although the infinitive is generally understood to carry the same tense as the verb in the main clause (Biber et al. 199, 198; Quirk et al. 1985, 995). Tense relations aside, however, the infinitive can combine with either the perfective or the progressive aspect and it can also appear in the passive form (Gu 2019, 3-5). The following examples showcase a perfective, progressive, and passive form of the infinitive respectively.
[13] [a] We're glad to have invited you. (Quirk et al. 1985, 154)
[b] I'd like to be working. (Quirk et al. 1985, 154)
[c] I'd hate to be questioned about it. (Quirk et al. 1985, 154)
When the infinitive is combined with the perfective aspect, it carries the meaning of an event that happened prior to the event in the main clause (Greenbaum 1996, 275; Gu 2019, 4). Thus, the act of inviting in [13a] had to have happened before the present state of being glad. Combining the infinitive with the progressive aspect gives the verb form a meaning of duration, i.e., something that is happening over a longer period (Greenbaum 1996, 278; Gu 2019, 5). It can thus be inferred that the speaker in [13b] wants to find a permanent job.

Turning our attention back to tense relations for a second, in cases such as the one in [12b], it can be said that while the infinitive carries the same tense as the verb in the main clause, it refers to a future event. According to Egan (2008, 91-94), this future event typically happens in very close temporal succession following the main clause event, although there are cases in which the infinitive may refer to something happening in a relatively distant future.

Unlike the to-infinitive, the bare infinitive may refer not only to events happening after the event in the main clause, but also simultaneously with it (Egan 2008, 91-94). The example in [12a] is not fit for the analysis of tense as the bare infinitive is part of the main clause verb phrase. We must therefore look at a different example.
[14] Rather than you do the job, I'd prefer to finish it myself. (Quirk et al. 1985, 993)
In [14], the subordinate clause introduced by subordinator rather than refers to the same time as the main clause does. Although both the main and the subordinate clauses refer to a future event, the finishing of a job, the temporal relation of the subordinate clause to the main clause is that of simultaneity.

Speaking of the bare infinitive, its use in subordinate clause constructions is extremely limited. Quirk et al. (1985, 1003-04) list only two subordinators that may introduce bare infinitival clauses: rather than and sooner than, both having the synonymous meaning of expressing a speaker's preference. It is true that bare infinitive clauses may appear without a subordinator, yet their frequency is still significantly lower than that of to-infinitive clauses (Leech and Svartvik 1975, 194). This is because very few English verbs allow for complementation by bare infinitive constructions. Eastwood $(1994,158)$ and Alexander $(1988,299-303)$ list causative verbs (e.g., make, let, have, etc.) and verbs of perception (feel, hear, notice, observe, etc.) as the two categories most frequently linked with bare infinitive clauses. Additionally, the bare infinitive may sometimes follow the conjunctions but and except, or appear with verbs where the omission of the infinitive marker "to" is possible (e.g., help, know, etc.) (Eastwood 1994, 158; Alexander 1988, 301). It is also possible for bare infinitive clauses to function as subject complements following the verb be (Eastwood 1994, 158; Quirk et al. 1985, 993) The sentences in example [15] illustrate all these possible bare infinitive constructions.
[15] [a] The official made me fill in a form. (Eastwood 1994, 158)
[b] Someone saw the men leave the building. (Eastwood 1994, 158)
[c] As for housework, I do everything but cook. (Eastwood 1994, 158)
[d] Everyone in the village helped build the new Youth Centre. (Alexander 1988, 301)
[e] The only thing I can do is apologize. (Eastwood 1994, 158)
Outside of these clausal constructions, however, the bare infinitive merely appears in verb phrases following modal verbs (see example [12a]) or the dummy operator do (Greenbaum and Nelson 2002, 62). Because this thesis focuses on the analysis of clauses, it has been deemed unimportant to describe the bare infinitive in more detail. Additionally, it has been decided that bare infinitive clauses will not be analyzed in the practical part of this thesis due to their relative infrequency of occurrence, and the corpus will thus consist of to-infinitive clauses only.

Turning our attention solely to the to-infinitive now, the first thing that needs to be discussed is the infinitive marker "to." There is general discord among authors as far as the classification of this function word is concerned. In their chapter on word classes, Quirk et al. (1985, 67-68) state that, along with the negative particle "not," the infinitive marker "to" cannot be classified as belonging specifically to any of the major English word classes. They additionally propose that "to" can be looked at as conveying spatial meaning, like that of the preposition "to," which has the exact same form (Quirk et al. 1985, 687). Duffley (2003, 332-33) echoes this by saying that the infinitival "to" carries the meaning of movement which leads to the completion of the event encompassed in the verb placed after the infinitive marker. He argues that the starting point for the verb in the infinitive form is sometime prior to the event described by it, the event in the main clause providing clues for the most likely starting point (Duffley 2003, 332-33). Looking at the to-infinitive clause in [12b], it can be said that Duffley's proposition has merit as the starting point for the infinitive (to call) is the present (we want), the infinitive itself referring to the future.

Huddleston and Pullum (2002) offer two different possible interpretations of the infinitive marker "to:" as an auxiliary verb and as a verb phrase subordinator. The argument for the former stems from the fact that "to" can be seen as the head of a complex verb phrase, which is in most cases introduced by an auxiliary verb. On the other hand, the argument for the classification of the infinitive marker "to" as a verb phrase subordinator is that it is similar in function to subordinators such as that or whether in that it carries no meaning of its own and is simply used to introduce the following verb phrase. Huddleston and Pullum (2002) do, however, proclaim that no matter the classification, the infinitival "to" is a special element either way. If classified as an auxiliary verb, it is an unusual one because it never changes its form. If classified as a subordinator, it is different from other subordinating conjunctions in that it does not introduce clauses, but it is merely a verb phrase subordinator. (Huddleston and Pullum 2002, 1183-87) For the purposes of this thesis, it is unnecessary to devote any more time to the classification of the infinitival "to." It will simply be referred to as the infinitive marker.

Finally, it should be mentioned that infinitive clauses have a reducing function, as is true of all non-finite clauses (see chapter 2). What this means is that they are frequently subjectless and not introduced by a subordinator, they lack tense markers, they cannot be modified by modal verbs, etc. As such, they are especially common in written registers, providing authors with the opportunity to reduce the number of words used and compress as much information into as little space as possible. Infinitive and other non-finite clauses are thus economical constructions.
(Greenbaum and Nelson 2002, 126-27; Kozáčiková 2015, 53-54, Quirk et al. 1985, 995) The reducing function of infinitive clauses may be illustrated using example [16].
[16] I told you not to go. (Eastwood 1994, 146)
The infinitive clause not to go could be perceived as equivalent to the finite clause that you should not go. The finite paraphrase consists of five words, while the reduced infinitive clause is only three words in length. The subject (you) can be left out and in fact its absence itself has a reducing function because, generally speaking, the subject of a to-infinitive must be introduced by the preposition for (Huddleston and Pullum 2002, 65). Similarly, the subordinator (that) does not have to be used as the infinitive marker "to" already has a subordinating function. Finally, the modal verb (should) is omitted as well as it cannot co-occur with the toinfinitive. Information regarding the missing elements must be inferred from linguistic, and sometimes event extra-linguistic, context (Huddleston and Pullum 2002, 60).

Example [16] can also be used to illustrate how infinitival clauses are negated. Unlike in finite clauses, where the negative particle combines with an auxiliary/modal verb for the clause to have negative meaning, in infinitive clauses, it is merely placed before the infinitive marker "to" (Eastwood 1994, 146). Once again, this reduces the clause by a word.

Having defined the basic functions of the to-infinitive, its structural components, and morphological features, it is now time to observe the different functional categories the toinfinitive clause may be classified as. Broadly speaking, to-infinitive clauses may function as adverbials, nouns, post-modifiers, or as part of comparative constructions. Sub-chapters 3.13.6 will discuss each of these categories in detail.

### 3.1 Adverbial adjuncts

One of the most common uses of the to-infinitive structure is as adverbial adjuncts of purpose or time. Before discussing these two clause types in detail, it is essential the term adjunct be defined first. Adverbial adjuncts differ from other types of adverbials in that they are fully embedded within the matrix clause they are linked to. They may appear initially, medially, or finally. Adjunctive clauses provide circumstances for the event in the main clause. Adjuncts of purpose express the reasoning or motivation behind the event or action in the matrix clause, while those of time provide the temporal setting for the matrix event. (Alexander 1988, 24-27; Quirk et al. 1985, 1070-79) The example below showcases to-infinitive clauses of purpose and time respectively.
[17] [a] He came to see the performance. (Gu 2019, 32)
[b] I ran all the way to find that he had gone. (Gu 2019, 33)
The infinitive clause in [17a] provides the reason behind the speaker coming, i.e., so that they could see the performance. In [17b], the temporal interpretation of the to-infinitive is a little more implicit in that it comes from the fact that the infinitive expresses something that happened after the event in the main clause. The sentence could thus be paraphrased using a temporal subordinator by reversing the relationship of subordination so that the infinitive becomes the main clause: After I ran all the way, I found that he had gone. (Quirk et al. 1985, 1079)

It is of note that the term "adverbial adjunct" is not used universally, each author instead choosing to apply their own terminology. While Biber et al. (1999) use the term "circumstance adverbials," hinting at the circumstantial meaning of these elements, Huddleston and Pullum simply apply the term "adjunct of purpose and result," the word "adjunct" meaning "adverbial." This thesis will, however, follow the terminology of Quirk et al. (1985) where the term "adverbial adjunct" is used.

Adverbial clauses of purpose are extremely common in the form of a to-infinitive, with Quirk et al. $(1985,1107)$ even mentioning that the infinitival construction is used far more frequently than a finite clause to express the meaning of purpose. Even though they typically do not contain a subordinator, to-infinitive purpose clauses may also be introduced using the complex subordinators in order (to) and so as (to) (Greenbaum 1996, 344). Alternatively, negative purpose may be expressed using in order not (to) and so as not (to) (Quirk et al. 1985, 1108).

Although it is possible for purpose adjuncts to appear both initially and finally, the initial position is relatively infrequent. This is due to the fact that the subject implied in the subordinate clause must be identical with the subject in the main clause in order for the infinitive clause to be fronted. When the object of the main clause can be understood as the subject of the infinitive, the purpose clause can never be placed initially. (Quirk et al. 1985, 1108) Such is the case in the following example:
[18] I lent Paul a dollar to get home. (Quirk et al. 1985, 1108)
The sentence in [18] may be considered ambiguous in that the subject of the infinitive is not explicitly expressed, yet one can infer that Paul is most likely to be the understood infinitive subject. If we move the infinitive clause to the initial position (To get home, I lent Paul a dollar.), the meaning of the entire clause shifts to express that the purpose behind the speaker lending Paul money was so that the speaker could get home.

In order for the sentence in [18] to be unambiguous, the subject of the infinitive has to be explicitly expressed using the for + subject + to structure: I lent Paul a dollar for him to get home. Clauses introduced by the complex subordinator so as are unique in that they are always placed finally, and their subject is always identical with the matrix subject. That is also why these clauses can never have a subject introduced by the for-construction. (Gu 2019, 32-33; Huddleston and Pullum 2002, 728)

Temporal to-infinitives, such as the one in [17b], are less frequent than those of purpose. These clauses are restricted in both their meaning and position. They may only be placed finally, and their meaning is always that of the outcome of the event in the main clause. (Alexander 1988, 24 ; Quirk et al. 1985 , 1079) The main issue that arises when it comes to-infinitive clauses of time is their classification. Many authors (see Biber et al. 1999, 828; Gu 2019, 33-34) consider these clauses to carry a meaning of result rather than time. Even Quirk et al. $(1985,1079)$, who propose the classification of these $t o$-infinitives as temporal, state that they do resemble clauses of result in their restricted placement in a sentence and their meaning. To illustrate this, we may use the following example:
[19] Ms. R went abroad never to return. (Gu 2019, 33)
Although the sentence in [19] may express a temporal sequence where Ms. R had to have gone abroad first in order to never come back, the infinitive clause may also be interpreted as expressing the result or outcome of going abroad. Both classifications undoubtedly have their merit, and they can both be true at the same time. It has thus been decided that instead of choosing one term over the other, this thesis will apply both and classify $t o$-infinitives like the one in [19] as "temporal result clauses."

### 3.2 Adverbial disjuncts

Adverbial disjuncts are another category of adverbial clauses that may occur in the $t o$-infinitive form. They differ from adverbial adjuncts in that instead of providing circumstances for the event in the main clause, they contain comments on the style or form of the proposition in the matrix clause, or on its content. Because they provide the speaker's view or judgment, their subject is understood to be the authorial "I." Unlike adjuncts, which are fully embedded within their matrix clauses, adverbial disjuncts are peripheral to the clause they are attached to. Their peripheral nature can be illustrated by the fact that no matter what position they appear in, they are always separated from the rest of the sentence either by intonation (in speech) or punctuation marks (in writing). Just like their adjunctive counterparts, adverbial disjuncts may be placed
initially, medially, or finally. (Biber et al. 1999, 853-54; Eastwood 1994, 147; Quirk et al. 1985, 1070-72)

It is worth mentioning that authors generally use different names for this category of clauses. The term "disjunct" is in fact only used by Quirk et al. (1985) and Greenbaum (1996). Biber et al. (1999) refer to these clauses as stance adverbials, whereas Huddleston and Pullum (2002) completely avoid creating a separate category for these adverbials, instead placing them under several different subdivisions of "adjuncts," a term that is equivalent in their terminology to the traditional term "adverbial." It has been decided that the terminology of Quirk et al. (1985) will be followed in this thesis.

It might also be of interest that authors generally identify two major sub-categories of disjunctive clauses based on whether they comment on the style/form of the proposition in the main clause, or on its content. In Quirk et al. (1985), these two categories are labeled "style disjuncts" and "content disjuncts" respectively. Other authors use different terminologies but listing them here would be irrelevant. The division of disjunctive clauses into content and style disjuncts is redundant as well because to-infinitive clauses can, under normal circumstances, only function as style disjunctive comment clauses (Biber et al. 1999, 866, Greenbaum 1996, 346). One such clause can be found in the example below:
[20] I'm not sure what to do, to be honest. (Quirk et al. 1985, 1113)
The $t o$-infinitive clause in [20] provides a comment on the style of the proposition in the main clause, namely that what the speaker is saying is to be understood as an honest statement. As mentioned in earlier paragraphs, the clause is separated from the rest of the sentence by commas, illustrating its peripheral nature.

Lastly, it is of note that Biber et al. $(1999,862)$ and Alexander $(1988,305)$ state that there is a considerable number of to-infinitive disjuncts that have become conventionalized and are fixed expression by this point. Quirk et al. $(1985,1113-18)$ agree and list the following as examples: to be fair, to be honest, to be frank, etc. They, however, also mention that despite the many cliché and idiomatic expressions, this category of clauses allows for the coinage of at least some new expressions (Quirk et al. 1985, 1113).

### 3.3 Adverbial conjuncts

Adverbial conjuncts are the third and final category of adverbial clauses that may appear in the to-infinitive form. Just like disjuncts, conjunctive clauses stand outside the main structure of a
sentence and if we relate them to the speaker/author, they provide a sort of comment on how the following proposition is to be understood. Unlike disjuncts, however, conjuncts have a conjoining or linking function similar to that of conjunctions, i.e., they show that there is some sort of connection between two independent units of text. This connection can be between elements of any rank: two sentences, two phrases, two words within a phrase, or even two larger units of text such as paragraphs. This makes conjuncts important devices for textual cohesion. (Biber et al. 1999, 875; Huddleston and Pullum 2002, 775-76; Quirk et al. 1985, 631-632; ibid, 1068-69)

To-infinitive clauses functioning as conjunctive adverbials are relatively rare and because of their similarities with style disjuncts in that their subject is to be understood as the authorial "I," they may alternatively be classified as disjunctive clauses (Quirk et al. 1985, 1068-69). Similarly to style disjuncts, most to-infinitive conjunctive clauses are also conventionalized (Quirk et al. 1985, 1069). An example of a to-infinitive clause functioning as an adverbial conjunct can be found below:
[21] To sum up, the purpose of the present project was initially to make an applied study of some aspects of driver behavior (...) (Biber et al. 1999, 885)

The $t o$-infinitive clause in [21] not only links the sentence to whatever precedes it, but it also signals that whatever follows is to be understood as a summary. This is in line with Quirk et al. (1985, 632)'s proposition that conjunctive clauses also have a focusing function, giving attention to whatever follows. Included among to-infinitive conjuncts are to begin (with), to cap it (all), to conclude, to continue, to recap, to recapitulate, to start (with) and to summarize (Quirk et al. 1985, 1069).

As with disjunctive clauses, the terminology regarding this clause type differs from one author to the next one. The term "conjunct" is used by Quirk et al. (1985). Biber et al. (1999) use the term "linking adverbials," highlighting the linking function of these clauses, while Huddleston and Pullum (2002) refer to these adverbials as "connective adjuncts," with the word "adjunct" once again equivalent to the traditional "adverbial." The terminology used by Quirk et al. (1985) will be followed in this thesis.

### 3.4 Nominal clauses

Frequently, to-infinitive clauses have a function similar to that of nouns and are thus considered nominal. These clauses can take the position and function of the following clausal elements: the subject, direct object, subject complement, and adjectival complement. To-infinitival object
complement clauses are possible as well, although they are very uncommon. Additionally, appositive clauses (see chapter 3.6) may be considered nominal in that apposition typically occurs between two noun phrases. (Biber et al. 1999, 198-99; Greenbaum 1996, 330-31; Greenbaum and Nelson 2002, 127-28; Quirk et al. 1985, 1061-62) All of these functions, with the exception of apposition, are illustrated below.
[22] [a] To be neutral in this conflict is out of the question. (Quirk et al. 1985, 1061)
[b] He likes to relax. (Quirk et al. 1985, 1061)
[c] The best excuse is to say that you have an examination tomorrow morning. (Quirk et al. 1985, 1961)
[d] I'm very eager to meet her. (Quirk et al. 1985, 1061)
[e] Some of these issues dropped out of Marx's later works because he considered them to have been satisfactorily dealth with. (Biber et al. 1999, 199)

In [22a], the to-infinitive is placed in the initial, subjective position and therefore takes on the function of the subject in the sentence. The to-infinitive in [22b] functions as the direct object of the main clause verb like. [22c] is an example of a to-infinitive subject complement. The copular verb be links the subject the best excuse with the to-infinitive clause, which provides some sort of characterization of the aforementioned noun phrase. In [22d], the to-infinitive serves as a complement for the adjective eager. Because to-infinitives such as the one in [22d] function as a kind of post-modifier of the adjective, Greenbaum and Nelson $(2002,128)$ classify these clauses as modifiers similar to relative and appositive clauses (see chapter 3.6). This thesis will, however, follow the majority classification of Quirk et al. (1985), Biber et al. (1999) or Greenbaum (1996) who consider these constructions nominal. Finally, the to-infinitive clause in [22e] has the function of object complement, providing further characterization for and information about the direct object "them."

Despite all the examples above being declarative, nominal to-infinitives may also function as interrogative clauses. More specifically, the to-infinitive may form a $w h$-interrogative, yes/nointerrogative or alternative interrogative clause. These differ from the clauses in [22] in that they do not correspond to statements but are analogous to questions. (Greenbaum 1996, 335; Greenbaum and Nelson 2002, 128; Quirk et al. 1985, 1050-54) Additionally, under very limited circumstances, the to-infinitive construction may be found as part of nominal relative clauses (Quirk et al. 1985, 1056-58). All four of these clause types are illustrated below:
[23] [a] I don't know what to say. (Quirk et al. 1985, 1052)
[b] I don't know whether to see my doctor today. (Quirk et al. 1985, 1054)
[c] He didn't tell us whether to wait for him or (whether to) go on without him. (Quirk et al. 1985, 1053)
[d] That's where to go for your next vacation. (Quirk et al. 1985, 1058)
In [23a], the infinitive is preceded by a $w h$-element and is thus a $w h$-interrogative clause functioning as direct object. [23b] and [23c] both have clauses introduced by the subordinator whether. The former is yes/no interrogative because the answer to the corresponding question would be either yes or no. The latter, on the other hand, is an alternative interrogative, providing two alternative answer options using the correlative subordinators whether ... or.

Finally, the infinitive in [23d] functions as a nominal relative clause. These clauses are often indistinguishable from $w h$-interrogatives because they are also introduced by $w h$-elements. Yet, in the case of nominal relative clauses, the $w h$-item functions as both the antecedent (head noun) and the relative pronoun. (Quirk et al. 1985, 1056) That is why nominal relative clauses are often seen as noun phrases post-modified by relative clauses (Quirk et al. 1985, 1056), i.e., That's the place where to go for your next vacation.

It is also possible for a seemingly nominal clause to function as a complement that cannot be categorized as either of the five options in [22]. This is the case particularly with clauses where the subject of the to-infinitive is made the subject of a passive sentence. (Quirk et al. 1985, 1062) One such clause can be observed in [21b].
[24] [a] They considered her to be the best candidate. (Quirk et al. 1985, 1062)
[b] She was considered to be the best candidate. (Quirk et al. 1985, 1062)
In the active construction [24a], it is clear the to-infinitive functions as the complement of the direct object her. Simultaneously, while being the object of the matrix clause, her can also be identified as the subject of the to-infinitive clause. In the passivized sentence [24b], the subject her of the infinitive is raised to the position of the subject of the entire sentence. By analogy, we could still consider the to-infinitive to be an object complement. However, since this seems rather confusing, it has been decided that clauses such as the one in [24b] will be classified as complex-transitive complement of the verb and analyzed in the "other" section of this thesis (see chapter 4.1.7).

To-infinitives that function as subject or direct object in a sentence can be extraposed. What this means is that the to-infinitive clause is postposed, i.e., moved to the final position in a sentence and replaced by the anticipatory subject it. Extraposition is more frequent when it comes to subject clauses. Clauses are usually extraposed following the principle of end-weight, where constructions which are long and would therefore make the understanding of a proposition more difficult if placed initially are moved to the end of the sentence. This helps the recipient take in the information. (Eastwood 1994, 147; Greenbaum and Nelson 2002, 13171; Quirk et al. 1985, 1062) Extraposed subject and object to-infinitives can be found in examples [25a] and [25b] below respectively.
[25] [a] It's impossible to say when they are arriving. (Greenbaum and Nelson 2002, 131)
[b] I think it wiser to leave at once. (Quirk et al. 1985, 1062)
Lastly, it needs to be mentioned that there is one category of verbs that combine with the toinfinitive regarding which there seems to be general discord: catenative verbs. These are verbs that have a predisposition for forming chains with non-finite verbs and these chains may be indefinite in length (Huddleston and Pullum 2002, 1177). Huddleston and Pullum (2002) seem to consider many verbs catenative, including like (to) or want (to), classifying examples of toinfinitives such as the one in [22b] as catenative complements. Quirk et a. (1985), Eastwood (1994) or Alexander (1988), on the other hand, classify only a few verbs as catenative. These include seem (to), hope (to), happen (to), etc. What makes these verbs unique is that they are intransitive, meaning they cannot carry an object, unlike like and want, which are very much transitive (Alexander 1988, 304; Eastwood 1994, 148). It has thus been decided that, for the purposes of this thesis, only intransitive verbs will be classified as catenative and analyzed in the "other" section of this thesis (see chapter 4.1.7). ${ }^{2}$

### 3.5 Comparative clauses

Relatively infrequently, to-infinitives may appear within comparative constructions. While comparative clauses are a somewhat vast clause type with many sub-categories, the $t o$-infinitive may only appear within clauses of sufficiency and excess. First, we need to address those features that all comparatives have in common. Comparative clauses compare the proposition in the matrix clause with that in subordinate clause. There needs to be some standard of

[^1]comparison that is specified by a comparative element, or comp-element. When it comes to clauses of sufficiency and excess, the comp-element is typically an adjective. Clauses of sufficiency modify this adjective by adding enough at the end, while clauses of excess premodify it using too. (Alexander 1988, 310-11; Greenbaum 1996, 346; Quirk et al. 1127-42) Example [26] below illustrates a clause of sufficiency and a clause of excess respectively.
[26] [a] You're old enough to look after yourself. (Quirk et al. 1985, 1140)
[b] I'm much too tired to go out. (Quirk et al. 1985, 1140)
In [26a], the adjective "old" is the comp-element, age being the standard of comparison. The adjective is post-modified by enough, carrying the meaning of sufficiency. In [26b], the adjective "tired" is the comp-element, with the level of tiredness being the standard of comparison. The adjective is pre-modified by too, signaling the meaning of excess.

To-infinitive clauses of sufficiency and excess combine the meaning of comparison with that of purpose or result (Quirk et al. 1985, 1139-40). In [26b], the comparative clause could thus be interpreted as implying what the result of being too tired was. Alexander $(1988,308-11)$ and Eastwood (1994, 153-54) propose that because the to-infinitive comparative clause is always linked to an adjective, it could be classified as belonging to the category of post-modifiers (see chapter 3.6). This is, however, challenged by Huddleston and Pullum $(2002,1256)$ who state that while the to-infinitive is embedded in the adjective phrase, it is licensed by too or enough rather than the adjective itself. It has thus been decided that due to their specific nature, clauses of sufficiency and excess would be treated as a separate category.

### 3.6 Post-modifiers in noun phrases

Lastly, to-infinitive clauses may have a function similar to that of relative clauses, i.e., postmodifiers in noun phrases. Unlike most clauses discussed in chapters 3.1-3.5, to-infinitive postmodifiers are not embedded within a clause, but they are linked to a noun. This noun is called the antecedent, or the head of the noun phrase, and it is the element around which all the constituents of the noun phrase cluster. The head noun may have its determination (elements such as the, all, both, this, etc.), pre-modification (elements placed before the antecedent), and post-modification (elements placed after the antecedent). Generally speaking, modification provides some additional information about the head noun, either specifying it or adding details about it. (Greenbaum and Nelson 2002, 128; Quirk et al. 1985, 1238-42) The examples below illustrate two types of to-infinitive post-modifiers we may identify.
[27] [a] The man to help you is Mr. Johnson (Quirk et al. 1985, 1266)
[b] The appeal to give blood received strong support. (Quirk et al. 1985, 1271)
The infinitive clause in [27a] would be considered equivalent to a relative clause. In fact, it can be paraphrased as such: The man who will help you is Mr. Johnson. In general, relative clauses provide specification to concrete nouns, either helping the recipient identify the correct specimen of a particular class or simply supplying details about the head noun (Alexander 1988, 312; Eastwood 1994, 155; Quirk et al. 1985, 1239-40). In [27a], the infinitive specifies what kind of man Mr. Johnson is, i.e., one capable of helping the recipient.

Girard and Malan (1999, 31-37) state that even though to-infinitive constructions, such as the one in [27a], share a lot of features with relative clauses, there is discord among grammarians as to whether the two clause types should be treated as though belonging to the same category. Discussing whether this type of $t o$-infinitive post-modifier is in fact a relative construction is unimportant. For the purposes of this thesis, they will be viewed as such. This is in part because it is possible for the to-infinitive to be introduced by a relative pronoun (e.g., The time at which to go...), although this construction is extremely rare and generally only restricted to formal contexts (Huddleston and Pullum 2002, 1067-68; Quirk et al. 1985, 1266-67).

The $t o$-infinitive in [27b] is different in that it is equivalent to appositive constructions. Apposition is generally a linguistic phenomenon where two noun phrases are co-referents of one another, each referring to the other and vice versa. Appositive clauses are restricted only to nouns that are abstract in meaning, typically those formed from verbs (decision, wish, refusal, etc.) or adjectives (determination, willingness, etc.). (Alexander 1988, 311; Eastwood 1994, 155; Quirk et al. 1985, 1300-02) The infinitive clause in [27b] provides information about the content of the noun phrase appeal, giving the abstract noun more concrete identification. The infinitive references the noun appeal and vice versa.

Quirk et al. $(1985,1301)$ claim that apposition is very similar to copular verb relationships (see chapter 3.4). The noun phrase in [27b] could thus be paraphrased as: the appeal was to give blood. Because apposition is generally only restricted to noun phrases and it can be seen as analogous to copular constructions, to-infinitives like the one in [27b] could alternatively be classified as nominal clauses. However, it has been decided that due to the infinitive's postmodifying function, it is more fitting to classify these clauses as post-modifiers.

Lastly, it is of note that both appositive and relative to-infinitive clauses may be restrictive as well as non-restrictive. Example [27] contains restrictive clauses only. What this means is that
their presence is essential for the full understanding of the noun phrase they post-modify and therefore they cannot be omitted (Thomson and Martinet 1986, 81). Quirk et al. (1985, 1239) define restrictiveness as something that limits the possible references of the antecedent. Thus, we can say the to-infinitive clause in [27a] limits the reference of the noun phrase the man by signaling what kind of man Mr. Johnson is. Similarly, the appositive in [27b] limits the meaning of appeal by specifying what the appeal entails.

When a clause is non-restrictive, its presence is not necessary for the full understanding of the sentence (Thomson and Martinet 1986, 85). Generally speaking, non-restrictive post-modifiers merely provide extra information or details that need not be mentioned, either because they are not relevant or have already been previously discussed (Quirk et al. 1985, 1239). Non-restrictive relative and appositive clauses are illustrated in the example below.
[28] [a] The scholar, to be found daily in the British Museum, has devoted his life to the history of science. (Quirk et al. 1985, 1270)
[b] This last appeal, to come and visit him, was never sent. (Quirk et al. 1985, 1271)

In [28a], the relative infinitive clause merely provides details about where and when the scholar can be found, its omission having no effect on the full understanding of the sentence. Similarly, we can assume the appositive clause in [28b] contains information that had already been previously mentioned and is thus unimportant for the recipient to fully understand the sentence. Non-restrictive clauses can easily be identified in that they are typically parenthetical and are thus separated from the rest of the sentence by punctuation in writing or intonation in speech (Quirk et al. 1985, 1242).

## 4. Discourse analysis

The practical part of this thesis will focus on analyzing occurrences of the to-infinitive construction in academic and newspaper texts and highlighting the prevailing tendencies in relation to discourse type. The main goal of the analysis is to find out whether to-infinitive clauses are more frequently used in academic or newspaper discourse. This introductory section will serve to define the methodology used in collecting and classifying the corpus data and to provide information about the steps taken in the analysis.

As far as the corpus collected for the purposes of this thesis is concerned, it was decided that the same amount of both academic and newspaper texts must be analyzed in order for the analysis to be credible. That is why the source material includes 10 academic texts and 10 newspaper articles. When it comes to the number of clauses analyzed, the initial goal was to find at least 400 occurrences of $t o$-infinitives. This was successfully achieved as the overall corpus consists of 457 to-infinitives.

In terms of what text types were included and which were not, the goal was to analyze texts which would be of relatively comparable length so that one discourse type would not outweigh the other. That is why the academic corpus consists of essays, journal articles and research papers, i.e., text types that are similar in length to newspaper articles/reports. Longer pieces of writing, such as theses and dissertations, were thus left out. Similarly, the newspaper corpus merely consists of news reports, meaning genres such as editorials, adverts or interviews were excluded.

The individual texts were analyzed in their entirety, meaning all the occurrences of to-infinitive clauses found are included in the corpus. It should be mentioned though that "in their entirety" here refers to the main body of the text and its headline. This means that abstracts of academic texts were excluded from the analysis.

Both the academic and newspaper texts were taken off online websites. The source material for the academic corpus comes from the GALE online database of authentic academic writing. These texts were originally included in the following academic journals: American Jewish History, BMC Psychiatry, Diverse Issues in Higher Education, eLife, First Things: A Monthly Journal of Religion and Public Life, Journal of Correctional Education, Nature, Nature Neuroscience, and The Wilson Quarterly. The academic corpus can be found in appendix 1.

The news articles collected for the purposes of this thesis were found on the following online newspaper websites: AP News, BBC News, CNN, Daily Express, New York Post, The Guardian,

The Huffington Post, The Independent, The Sun, and The Telegraph. The newspaper corpus can be found in appendix 2 .

The collected data was classified into categories based on the theoretical framework introduced in chapters 1-3 of this thesis, and the appendices below are structured based on these criteria. The overall results of the analysis will first be discussed in chapter 4.1. The sub-chapters 4.1.14.1.8 will then focus on observing the six major clause types described in 3.1-3.6 and on clauses that could not be classified as belonging to any of these categories, with some put in the "other" category and some considered "indeterminate." The main findings of the analysis will then be summarized in chapter 4.2.

### 4.1 Overall results

This chapter focuses on the overall results of the analysis of to-infinitives found in academic and newspaper texts. The table below showcases the occurrence of infinitive clauses in the two discourse types respectively. The clauses are divided into categories based on the criteria described in chapters 3.1-3.6. The categories are listed from most to least frequent. AD is an acronym for academic discourse, while ND means newspaper discourse. NP stands for noun phrase.

Table 1: Overall results

| Clause type | AD | ND | Overall |
| :---: | :---: | :---: | :---: |
| Nominal clause | 76 | 64 | 140 |
| Adverbial adjunct | 72 | 47 | 119 |
| NP post-modifiers | 48 | 26 | 74 |
| Comparative clause | 8 | 2 | 10 |
| Adverbial conjunct | 2 | 0 | 2 |
| Adverbial disjunct | 2 | 0 | 2 |
| Other | 44 | 21 | 65 |
| Indeterminate | 26 | 19 | 45 |
| Overall | $\mathbf{2 7 8}$ | $\mathbf{1 7 9}$ | $\mathbf{4 5 7}$ |

Looking at Table 1, we may observe that $t o$-infinitive clauses are ostensibly more frequent in academic discourse than in newspaper reports, constituting $61 \%$ of the overall corpus data. These numbers are deceiving, however. While it was the goal of this thesis to analyze texts of
comparable lengths, this turned out to be more difficult than expected and the objective was unfortunately not met.

The overall length of the academic corpus was 18444 words, while the newspaper corpus was a mere 7565 words long. This means that the academic source material observed in the analytical part of this thesis was almost three times the size of the newspaper discourse data. Calculating the number of to-infinitive occurrences per 1000 words, it becomes clear that infinitival clauses are actually much more frequent in newspaper articles than in academic writing.

If we divide the number of occurrences by the overall word count of each corpus and then multiply that number by 1000 , we get 15 and 24 occurrences per 1000 words in academic and newspaper texts respectively. This means that the overall size of the corpus inflated the results quite a bit, with the discourse type that is nearly three times larger in fact having nearly twice as few occurrences of infinitive clauses as the smaller corpus.

Other than that, both academic and newspaper discourse seem to follow similar trends of occurrence as there are almost no differences in terms of the distribution of clause types. Nominal clauses and adverbial adjuncts are the two most frequent categories in both corpora, with adverbial conjuncts and disjuncts essentially being non-factors in both.

Clauses that could not be classified as belonging to any of the six major categories defined in the theoretical part of this thesis were categorized as either "other" or "indeterminate." The "other" category includes complex-transitive complement clauses and catenative constructions (see chapter 3.4), but also prepositional complements. In short, these are clause types that simply do not fit the classification applied in this thesis yet are still distinctive enough to deserve attention. The "indeterminate" category, on the other hand, consists of clauses whose function is not clear-cut; therefore, they cannot be satisfactorily classified as belonging solely to one category, typically having dual interpretation.

The overall results of the analysis having been addressed, it is now time to have a look at the individual clause types in more detail. The sub-chapters 4.1.1.-4.1.8. will focus on analyzing all the categories listed in Table 1, with chapter 4.2 serving as a summary of the main findings of the analysis. The occurrence of each clause type in the two corpora will be observed and explained based on the theoretical knowledge regarding academic and newspaper discourse presented in chapter 1 of this thesis.

### 4.1.1 Nominal clauses

As can be seen in Table 1, nominal clauses were the most frequent category of to-infinitives in both academic and newspaper discourse. Although more occurrences (76) appeared in the former, we can assume that they are more frequent in the latter despite fewer instances (64) found in the corpus data. If we calculate the number of occurrences per 1000 words, we get 4 for academic discourse and 8.5 for newspaper discourse. This means that nominal clauses are more than twice as frequent in news reports as in academic texts.

Table 2 below showcases the number of occurrences per the sub-categories of nominal clauses mentioned in chapter 3.4.

Table 2: Sub-categories of nominal clauses

| Clause function | AD | ND | Overall |
| :---: | :---: | :---: | :---: |
| Direct object | 46 | 50 | 96 |
| Subject | 13 | 10 | 23 |
| Subject complement | 9 | 2 | 11 |
| Adjective complement | 8 | 2 | 10 |
| Overall | $\mathbf{7 6}$ | $\mathbf{6 4}$ | $\mathbf{1 4 0}$ |

Unsurprisingly, to-infinitive clauses functioning as direct object were the most frequent subtype of nominal infinitives in both corpora. Their occurrence is so common in newspaper discourse that despite the source material being smaller in size, the number of direct object infinitivals is higher there than in academic discourse. Nevertheless, object clauses are still extremely numerous in academic texts.

Looking more closely at the verbs that allowed for the direct object to-infinitive complementation, we may start to realize some differences between the uses of infinitive objects in the two corpora. Table 3 illustrates all the verbs that carried a to-infinitive object in the corpus of academic discourse, ranked from most to least frequent. The table only includes the traditional verb + to-infinitive constructions. Other, more specific instances will be discussed later.

Table 3: Verb + direct object in academic discourse

| Verb/s | Number of occurrences |
| :---: | :---: |
| need | 7 |
| seek | 6 |
| begin | 5 |


| continue <br> help | 4 |
| :---: | :---: |
| plan | 3 |
| claim <br> demand <br> propose <br> start <br> try <br> want | 1 |
| Overall | $\mathbf{3 5}$ |

Two groups of verbs seem to be particularly prevalent when it comes to carrying a to-infinitive object: verbs related to the beginning or continuation of processes (begin, continue, start) and verbs of planning (plan, seek). Interestingly, neither of them is as frequent as the verb need expressing necessity. It could be hypothesized, though, that need has a partially modal function, the construction need to often considered analogous to modals such as must or should. However, this thesis followed the proposition of Quirk et al. $(1985,138)$ that need only functions as a modal auxiliary with the bare infinitive. That is why to-infinitives such as the ones in [29] were classified as direct object clauses.
[29] While the present study results are promising, there are a number of limitations that need to be acknowledged. (appendix 1, NCO 22)

Because the infinitive clause in [29] can be replaced with a noun phrase of the same meaning without disabling the reader from understanding the sentence (...that need acknowledgement), it is considered an object clause. Within the context of academic discourse, the verb need seemed to have a function similar to a future warning, stating what needs to be done or what needs to happen before another event takes place. Therefore, it can be said to have an evaluative role, contributing to its high occurrence in academic writing.

It is interesting that the other verbs frequently co-occurring with a to-infinitive object also have somewhat of a future and putative meaning. The verbs of beginning or continuing processes seem to merely imply that the action expressed in the infinitive clause started but whether it finished or not is left unsaid. Similarly, verbs of planning usually carry the meaning of a future plan. Even when the verb is in the past tense, the proposition in the infinitive clause is something that was intended, but whether it was actually carried out or not is unknown.
[30] [a] Her 1975 novel, Consenting Adult, which sought to combat homophobia, similarly belonged to the genre of social protest novel. (appendix 1, NCO 27)
[b] For the next two days, the colonies continued to increase in size and to add layers of packed, almost coiled, filamentous cells. (appendix 1, NCO 15)

In [30b], it is merely implied that the novel mentioned was written for the purpose of combating homophobia. This shows just how much to-infinitive clauses carry an inherent meaning of purpose even though their function is not that of an adverbial purpose clause. In any way, it is not said whether the goal of fighting homophobes was indeed achieved or not. Similarly, in [30b], the verb continue merely implies that the events described by the coordinated infinitive clauses started. How or whether the action finished is unmentioned.

It appears verbs of beginning or continuation are frequent in academic discourse because they are useful tools of describing research and analyses in a dynamic way. Additionally, one could argue verbs like start or continue very closely resemble catenatives (see chapter 4.1.7) and are probably on the gradient between full and catenative verbs. On the other hand, verbs of planning are mostly used for mitigation, stating what the purpose of a particular action/event is, while avoiding having to mention whether it will or did actually happen that way.

Lastly, slightly surprising is the fact that verbs relating to opinions and claims were infrequent with $t o$-infinitive objects. I would have expected verbs like claim, demand, propose, etc. to appear way more in academic discourse, especially when citing or paraphrasing others' opinions. It is possible, however, that it is merely more usual to use that-clauses rather than toinfinitives with this verb type.

Having discussed the typical verbs carrying infinitive objects in academic discourse, it is now time to turn to the newspaper corpus. Table 4 below showcases the most frequent verbs in newspaper reporting that allow for a $t o$-infinitive object, listed from most to least frequent.

Table 4: Verb + direct object in newspaper discourse

| Verb/s | Number of occurrences |
| :---: | :---: |
| try | 10 |
| want | 5 |
| need | 4 |
| seek | 3 |
| continue | 2 |


| deserve <br> plan |  |
| :---: | :---: |
| claim |  |
| help |  |
| intend |  |
| like | 1 |
| prove |  |
| refuse | $\mathbf{3 4}$ |
| Overall |  |

Unlike with academic discourse, there appear to be no major overarching tendencies in newspaper writing as far as the most frequent verb types carrying infinitive objects are concerned. The verb try, which was found with an infinitive object 10 times, carries the meaning of somebody's attempt at something, while perhaps also implying their intention. Want and need are verbs expressing desires and necessity respectively. Seek, plan and continue have already been discussed previously. It is impossible to find any underlying patterns of use with these verbs, as they are all very different. The sentences in [31] display occurrences of the top two verbs from Table 4.
[31] [a] He denied trying to kill her or even ever having an axe. (appendix 2, NCO 21)
[b] "I wanted the government to pay for it and [to] do the right thing - it shouldn't have to be a celebrity that steps in." (appendix 2, NCO 14)

Not only was it impossible to identify any overarching tendencies as far as verbs carrying toinfinitive objects are concerned, there also does not appear to be any particular reason for why these verbs are used so frequently. It can merely be assumed that try is used in newspaper reporting for narrative purposes, when describing what agents attempted to do. It must be mentioned here that both want and need were mostly used in direct speech. This means journalists do not necessarily use these words, the main reason for their frequent occurrence being the common practice of newspapers to quote their sources.

In both the academic and newspaper corpus, there were a few verbs that are classified in the appendices below as carrying to-infinitive objects which are in their form intransitive. However, the infinitives were categorized as object clauses due to the fact that the verbs
carrying them can be paraphrased as prepositional verbs containing a noun phrase object (Quirk et al. 1985, 1188). Namely these were agree, aim, and struggle.
[32] [a] It marks the first time countries and groups, including longtime holdouts like the United States and the EU, have agreed to establish a fund for nations vulnerable to climate disasters made worse by pollution disproportionately produced by wealthy, industrialized nations. (appendix 2, NCO 56)
[b] The therapy aims to strengthen pathways to positive self-beliefs and [to] make them more easily accessible. (appendix 1, NCO 54)
[c] He will start at the front for Saturday's 24-lap dash, and will surely struggle to hold off the second-placed Max Verstappen. (appendix 2, NCO 54)

There were five occurrences of $t o$-infinitive objects introduced by the verb agree in the overall corpus, one of them is illustrated in example [32a]. Because we can replace the infinitive with a noun phrase and turn the verb agree into the prepositional verb agree on (...have agreed on the establishment of...), the clauses are classified as having a direct object function. The same applies to aim and struggle which occurred three times each followed by a to-infinitive.

Relatively infrequently, to-infinitives were also found functioning as direct objects with verbs that have a ditransitive function, meaning the infinitive was preceded by an indirect object. Interestingly, all of these verbs referred to a speech event of some sort: ask, call on, nip at, and scream. Only call on and ask appeared more than once with three and four overall occurrences respectively. Examples of these constructions can be found below.
[33] [a] The federal government asked the Supreme Court to reject the states' effort while also acknowledging that ending the restrictions abruptly would likely lead to "disruption and a temporary increase in unlawful border crossings." (appendix 2, NCO 40)
[b] On Friday, 10-year-old Ghanian activist Nakeeyat Dramani received a standing ovation in the plenary after calling on the delegates to "have a heart and [to] do the math." (appendix 2, NCO 23)
[c] "I am nipping at the staff not to put the heating on unless it's necessary." (appendix 2, NCO 12)

In these ditransitive constructions, the indirect object, which is usually a person or a group of people (e.g., the Supreme Court, the delegates, the staff, etc.), follows directly after the main
verb of the matrix clause, which is a speech act verb. The infinitive clause then functions as the direct object and in all cases expresses what the speech act of the main verb entails, i.e., what was actually said. For example, the infinitive in [29a] contains the content of what was asked of the Supreme Court. The same applies to the other two sentences.

Wh-infinitive clauses functioning as direct objects were also extremely uncommon. In fact, there was only one occurrence in the academic corpus, while only two such clauses appeared in the newspaper corpus. All of these are included in example [34] below.
[34] [a] "I don't know what to say, the team put me out on track at the right moment." (appendix 2, NCO 11)
[b] The Supreme Court's 5-4 decision comes as thousands of migrants have gathered on the Mexican side of the border, filling shelters and worrying advocates who are scrambling to figure out how to care for them. (appendix 2, NCO 37)
[c] Finally, patients receive information and training about receiving criticism and they discuss how to prevent relapse. (appendix 1, NCO 21)

Lastly, it is interesting to note that very few object clauses appeared in extraposition, especially when compared with subject clauses discussed in the upcoming paragraphs. This is hardly a surprise though as the extraposition of to-infinitive subjects is more frequent than having them placed initially, which cannot be said about object clauses. In fact, the objective infinitives were only extraposed when they were followed by an object complement. Three extraposed object clauses appeared in the academic corpus, while there was only one such construction in the newspaper corpus. Examples of extraposed infinitival objects may be found below.
[35] [a] The crucial move is to elaborate a burden-shifting framework that will make it impossible for universities to camouflage the practice of discrimination. (appendix $1, \mathrm{NCO}_{\mathrm{E}} 57$ )
[b] The war in Ukraine is illustrating today how conflict can drive food insecurity by reducing the amount of food available, by making it difficult for those in active conflict zones and those fleeing conflict to get enough food. (appendix 1, $\left.\mathrm{NCO}_{\mathrm{e}} 59\right)$
[c] Prior to the NFL's first-ever game in Germany, Tampa Bay Buccaneers legend Mike Alstott called it "an honor" to be able to work with U.S. military members on Wednesday. (appendix $2, \mathrm{NCO}_{\mathrm{E}} 60$ )

In all three sentences in [35], the infinitive object clause is postposed to the final position and replaced by the anticipatory object "it." As mentioned above, they are all followed by an object complement in the form of the adjectives impossible and difficult in [35a] and [35b] respectively, and the noun phrase an honor in [35c]. What is interesting and perhaps the most surprising finding of this analysis is that there is a tendency for the object complement of the to-infinitive in academic texts to be in the form of an adjective, while it is commonly in the form of a noun phrase in the case of newspaper articles. Same can be said for subject infinitive clauses and their subject complements (if there is one). See subject extraposition below for more observations regarding this phenomenon.

Subject clauses were the second most frequent category of nominal infinitivals in both corpora, with 13 and 10 occurrences in academic and newspaper discourse respectively. Adjusted for the size of the source material, it can be supposed that their frequency is still higher in news reports than in academic texts. Interestingly, only two infinitive clauses appeared in the canonical subject position, the rest were extraposed. Both these clauses are from the academic corpus and can be found in the example below.
[36] [a] To describe Americans as living under a 'regime"--like Eastern Europeans living under communism during the Cold War-- is to court dismay and disbelief. (appendix 1, NCS 12)
[b] To defeat it will require leadership and the exercise of political power. (appendix 1, NCS 13)

It is possible that the to-infinitive subject only appears in the initial position when its subject complement or the verb complementation is longer than the subject clause itself. In [36a], what follows the main verb is a construction longer than the initially positioned infinitive subject. [36a] is a very specific type of sentence because both the subject and its complement are in the form of a to-infinitive, therefore the rule would not apply there. The hypothesis that the length of the subject clause influences its position in a sentence appears plausible when looking at those that were found in extraposition.
[37] [a] It would be premature to interpret a small, negative global SCC from enduse energy consumption as good news, given that income inequities largely explain this result. (appendix $1, \mathrm{NCS}_{\mathrm{E}} 3$ )
[b] "It's even an honor to be out here coaching them up a little bit." (appendix $1, \operatorname{NCS}_{\mathrm{E}} 5$ )

In both [37a] and [37b], the subject complement following the copular verb be is very short. In the former, it is in the form of a one-word adjective, while in the latter it is a relatively simple noun phrase. We can assume that is why the infinitival clause, being the longer construction, is moved to the end of the sentence, following the principle of end-weight (see chapter 3.4) and making the sentence easier for the reader to understand.

It should also be mentioned here that 10 out of the 11 extraposed subject clauses found in the academic corpus had the exact same structure as the one in [37a], meaning the subject complement was in the form of an adjective. This being the case and recognizing that the same is true of object complements and extraposed object clauses, we may be able to hypothesize that academic discourse shows a prevalence for the co-occurrence of subject/object extraposition and the presence of an adjectival subject/object complement. In contrast, only two out of the 10 extraposed subjects in the newspaper discourse co-occurred with an adjectival subject complement. The rest either had a subject complement in the form of a noun phrase or they were followed by a non-copular verb.

We may, therefore, summarize that the high frequency of extraposition when it comes to toinfinitive subject clauses in both academic and newspaper discourse is a result of the author trying to make the text more easily consumable for the reader. If the longer infinitives were placed in the canonical subject position, the text would be much more challenging to read.

To-infinitive clauses functioning as subject complement were relatively infrequent in both corpora, with 9 and 2 occurrences in academic and newspaper discourse respectively. Even when adjusted for the size of the two corpora, this clause type was more frequent in academic writing. Examples of this clause type may be found in the following example.
[38] [a] The most immediate need is to shore up stability by increasing humanitarian supplies of food, fertilizer, and energy. (appendix 1, NCCs 64)
[b] The most important utility of blood biomarkers is to make people's lives better and to improve clinical confidence and risk prediction in Alzheimer's disease diagnosis," Dr Karikari said. (appendix 2, NCCs 61)

Interestingly, the clause in [36a] with a to-infinitive clause standing in for both the subject and the subject complement being an exception, all to-infinitive subject complement clauses found in the overall corpus had a function similar to that of apposition, i.e., they provided information about the content of abstract nouns. In [38a], the infinitive contains a detailed account of what the most immediate need is, defining the abstract noun phrase in a more concrete way. The same can be said about the to-infinitive clause in [38b]. We can thus hypothesize that the main function of to-infinitive subject complement clauses in both academic and newspaper discourse is to give concrete meaning to abstract subjects.

Lastly, to-infinitives functioning as complements of adjectives were the least frequent category of nominal clauses in the overall corpus, occurring as much as subject complement clauses in newspaper discourse with 2 instances, but only 8 such clauses found in the academic source material. The example below showcases two of these adjectival complements.
[39] [a] These disparate and diverse effects are difficult to quantify, particularly in economic terms. (appendix 1, $\mathrm{NCC}_{\mathrm{A}} 70$ )
[b] "A blood test is cheaper, safer and easier to administer, and it can improve clinical confidence in diagnosing Alzheimer's and selecting participants for clinical trial and disease monitoring," Dr Karikari said. (appendix 2, $\mathrm{NCC}_{\mathrm{A}} 64$ )

All of the to-infinitive adjectival complement clauses found in the two corpora occurred within the exact same pattern, meaning they all functioned as part of subject complement constructions following copular verbs whether it be the verb be or any other copula. Illustrating this using the examples above, the adjective difficult in [39a] along with its infinitival complement function as the subject complement of the noun phrase these disparate and diverse effects, with the copular verb be providing the link between these two items. The same applies in [39b]. We can thus surmise that in both academic and newspaper discourse, to-infinitive adjectival complements always function as internal elements within subject complement constructions.

In conclusion, we can say that to-infinitives functioning as nominal clauses are so frequent in academic and newspaper writing because, perhaps other than adverbial adjuncts, they are the main means for syntactic compression involving the use of the infinitive. They allow the authors to condense a lot of information into one sentence. In newspapers, this is an important tool for compressing as much information as possible into very limited space. In academic discourse, nominal to-infinitives perhaps allow for a more precise definition of concepts than noun phrases
would, while also functioning as tools for avoiding repetition, thus creating more complex syntax instead of introducing information repetitiously in shorter, separate sentences.

### 4.1.2 Adverbial adjuncts

To-infinitive clauses functioning as adverbial adjuncts were the second most frequent clause type in both corpora at 72 and 47 occurrences in academic and newspaper discourse respectively. Adjusted for the size of the source material, however, it is more likely for these clauses to appear in the latter, with 6.2 occurrences per 1000 words against the former's 3.9 occurrences. As described in chapter 3.1, infinitival adjuncts may either express the meaning of purpose or temporal result. Table 5 below showcases the frequency of occurrence for both these clauses in the two corpora analyzed.

Table 5: Adverbial adjunct type

| Adjunct | AD | ND | Overall |
| :---: | :---: | :---: | :---: |
| Purpose | 69 | 36 | 105 |
| Temporal result | 3 | 11 | 14 |
| Overall | $\mathbf{7 2}$ | $\mathbf{4 7}$ | $\mathbf{1 1 9}$ |

As obvious from Table 5, adverbial adjuncts of purpose way outweigh those of temporal result. Although there were twice as many occurrences of purpose adjuncts found in the academic discourse, when adjusted for corpus size, it becomes clear that the frequency of these clauses is still slightly higher in newspaper writing, with 4.7 occurrences per 1000 words over 3.7 instances in academic texts. Illustrated below are two clauses of purpose, one from each corpus.
[40] [a] Using the presence of specific traits to define this evolutionary transition often fails to be sufficiently general; instead, it may be more accurate to use evolutionary dynamics as an indicator. (appendix 1, AAP 3)
[b] Winslet donated $£ 17,000$ to the family’s GoFundMe page and contacted Ms Hunter to wish them well. (appendix 2, AAP 9)

Both [40a] and [40b] contain to-infinitive clauses that provide the reasoning for or motivation behind the event in the matrix clause. Thus, in [40a], the infinitival adjunct stresses what the purpose of using specific traits is, while the non-finite clause in [40b] highlights the motivation behind Kate Winslet calling Ms. Hunter.

What may be interesting is to have a look at what position in a sentence the purpose clauses occupy. Unlike temporal result clauses, to-infinitives expressing purpose are not restricted in
their position, meaning they can appear initially or finally, medial position being extremely unlikely, perhaps even impossible. Table 6 below contains information regarding the position of adverbial purpose clauses in both academic and newspaper discourse.

Table 6: Purpose clause position

| Position | AD | ND | Overall |
| :---: | :---: | :---: | :---: |
| Initial | 16 | 2 | 18 |
| Final | 53 | 34 | 87 |
| Overall | $\mathbf{6 9}$ | $\mathbf{3 6}$ | $\mathbf{1 0 5}$ |

We can see that the initial position of adverbial purpose adjuncts is far more common in academic texts, with 16 overall occurrences compared to 2 in newspaper discourse. While final position is more frequent in both corpora, which is in line with the fact that in order for an infinitival purpose clause to be fronted, its subject needs to be identical with the subject of the main clause (see chapter 3.1), the relatively high frequency of initial position in academic discourse is interesting to observe. Below are two to-infinitive clauses of purpose from the academic corpus that are placed initially.
[41] [a] To track where the electrons from dopamine metabolism go inside the mitochondria, the authors inhibited complex III and the adenine nucleotide translocase (ANT). (appendix 1, AAP 19)
[b] To counter the inevitable backlash, the Supreme Court must give Americans the weapons they need to stop quota-driven discrimination altogether. (appendix 1, AAP 47)

Very frequently, the infinitive purpose clauses had the same function as the one in [41a], which is to describe the methodology applied in the research. In sentences such as these, the infinitive construction serves as a description of the attempted result, with the main clause defining the methodology that was used to achieve the desired goal. Because the non-finite clause contains information regarding the desired result, it leans itself to be classified as a temporal result adjunct. However, temporal result clauses, as described in chapter 3.1, cannot occur initially as they are restricted to final position. Additionally, because the result is merely desired, although with strong implications that it was achieved, the clause still carries putative meaning of an unachieved goal that is typical of purpose clauses.

It should be stressed that clauses like the one in [41a] did not only appear in academic discourse but the two clauses found in the initial position in the newspaper corpus also had this correlation with the description of methodology. We can thus surmise that the frontal use of purpose clauses is strongly related to the definition of steps or methods applied during scientific or any other analyses or research. [41b] is slightly different in that the main clause contains more of a warning or advice, rather than methodology. The infinitive clause does, however, have the same function as in [41a], i.e., presenting the desired result.

Temporal result clauses were comparably infrequent in both academic and newspaper discourse, with 3 and 11 occurrences respectively. The higher frequency of these clauses in newspaper articles is hardly surprising. In my bachelor thesis from 2021 titled Adverbial Clauses in Newspaper Sports Discourse, I found that clauses of temporal result are especially frequent in newspaper sports reports, most commonly having the function of describing what the result of a sports event was or commenting on the actions of sportspeople during the sports event (Gregor 2021, 34). This appears to hold true as most of these clauses were again found in sports articles. The example below illustrates two temporal result clauses from the newspaper corpus and one from the academic corpus.
[42] [a] Liverpool profited from a disastrous Wout Faes performance as they came from behind to beat Leicester City 2-1 at Anfield on Friday night. (appendix 2, AAR 44)
[b] It was filed in the Southern district of Florida, where other Trump lawyers successfully sued to secure a special master who has been tasked with conducting an independent review of records seized by the FBI during an Aug. 8 search of Mar-a-Lago. (appendix 2, AAR 38)
[c] Further investigation revealed that HS-3 multiplied in a highly regulated manner, first creating short, pill-shaped cells (termed coccobacilli), which then elongated to form a single layer of tightly packed filamentous cells. (appendix 1, AAR 70)
[42a] represents the most common use of temporal result clauses. The infinitive contains the information about the result of the event in the main clause. Unlike with purpose adjuncts above, this result is already achieved, meaning the clause does not have a putative but a factual meaning. The majority of temporal result clauses from the newspaper discourse, six to be exact, appeared within a text about sports. The other five, reminiscent of the infinitive in [42b], had
some sort of relation to legal proceedings. The temporal result clause in [42b] mentions what the result of suing successfully was. Lastly, [42c] contains an example of a to-infinitive from the academic corpus that has the meaning of temporal result. In this case, the infinitive provides information about the result of cell elongation. As there were only three examples of this clause type found in the corpus, no overarching tendencies could be observed.

In conclusion, it can be inferred that to-infinitive adverbial adjunct clauses are as frequent as they are in academic and newspaper discourse because they allow for a lot of syntactic compression, similarly to their nominal counterparts. Purpose clauses are essential for both discourse types since authors of both typically have to write about the motivations behind and the desired results of either their own or other people's actions. Temporal results clauses, on the other hand, are an economical way of describing the actual result of certain events or actions. Perhaps, this is where the main distinction between purpose and temporal result clauses may be drawn. The former is concerned with the motivations and desires of people, whereas the latter merely focuses on the result of an event/action and is thus a lot more impersonal in meaning.

### 4.1.3 Post-modifiers in noun phrases

The third most frequent category of to-infinitive clauses in both academic and newspaper discourse were those functioning as post-modifiers in noun phrases, with 48 and 26 occurrences respectively. When adjusted for the size of the corpora, it once again becomes clear that postmodifying infinitive clauses are more frequent in newspaper writing with 3.4 occurrences per 1000 words as opposed to 2.6 in academic texts. As described in chapter 3.6, there are two main sub-types of infinitive post-modifiers: relative and appositive clauses. Table 7 below showcases the frequency of these two clause types in the two corpora analyzed.

Table 7: Post-modifier sub-type

| Clause type | AD | ND | Overall |
| :---: | :---: | :---: | :---: |
| Relative clause | 8 | 6 | 14 |
| Appositive clause | 40 | 19 | 59 |
| Indeterminate | 0 | 1 | 1 |
| Overall | $\mathbf{4 8}$ | $\mathbf{2 6}$ | $\mathbf{7 4}$ |

It is obvious from this table that relative infinitives, or rather infinitival clauses corresponding in meaning to relative constructions, are relatively infrequent in both academic and newspaper discourse, with appositive to-infinitive clauses making up the majority of occurrences. One may
hypothesize that the reason why apposition is more common than using relative to-infinitives in academic discourse is because this register is expected to contain a vast amount of elevated, abstract vocabulary that needs further definition. However, when looking at actual examples, it becomes unclear whether this is well and truly the case or not.
[43] [a] Literacy programs also provide youth with opportunities to work on interpersonal communication skills for conflict resolution and smoother transitions back into society (Drakeford, 2002). (appendix 1, PMA 20)
[b] On May 30, the EU's 27 member countries reached an agreement to phase out reliance on Russian oil. (appendix 1, PMA 38)

Both sentences in [43] contain an abstract noun, opportunities in [43a] and agreement in [43b] that is post-modified by a to-infinitive clause providing concrete information about what exactly the abstract noun entails. However, the two noun phrases are hardly elevated vocabulary that you would expect to find in academic discourse but that would be out of place in a newspaper text. In fact, the following examples from the newspaper corpus showcase vocabulary equivalent to that in [43].
[44] [a] The world has failed to reach an agreement to phase out fossil fuels after marathon UN climate talks were "stonewalled" by a number of oil-producing nations. (appendix 2, PMA 13)
[b] The Supreme Court's decision said that the court will review the issue of whether the states have the right to intervene in the legal fight over Title 42. (appendix 2, PMA 20)

The sentence in [44a] includes the same abstract noun as the one in [43b]. In [44b], the noun phrase post-modified by an appositive infinitive is right, which also commonly appeared in academic discourse. In fact, while there was not that much overlap as far as actual words found in the two corpora go, one would hardly call the post-modified abstract nouns appearing in academic discourse more elevated or less commonly used than those in newspaper discourse. It is for this reason and also because, when adjusted for the size of the corpora, appositive toinfinitives are about as frequent in newspaper writing ( 2.5 occurrences per 1000 words) as in academic texts ( 2.1 occurrences per 1000 words) that the hypothesis proposed in the second paragraph of this chapter seems unjustifiable.

This means that there appears to be no difference in the use of appositive post-modifiers across the two discourse types. Similarly, there also seems to be very little contrast between how
relative $t o$-infinitive post-modifiers are used in the two corpora. Examples of relative infinitive clauses may be found in the example below.
[45] [a] Beyond these direct effects on combatants, neighbors, and trade partners, Russia is the largest economy to be hit with such comprehensive sanctions since World War II, and the first in such an interdependent global economy. (appendix 1, PMR 3)
[b] Salute Her UK, the sister charity of Forward Assist, which supports military veterans struggling to adjust to civilian life, is the only UK gender-specific support service to offer therapy and interventions for survivors of in-service sexual abuse. (appendix 2, PMR 5)

In [45a], the highlighted infinitive clause may be seen as equivalent to the finite relative clause that has been hit by such comprehensive actions since World War II. Likewise, in [45b], we may paraphrase the to-infinitive as that offers therapy and interventions for survivors of inservice sexual abuse. Due to their relative infrequency at 8 and 6 occurrences in the academic and newspaper corpus respectively and the fact that appositive clauses were much more common, one may surmise that it is far more frequent for $t o$-infinitive clauses to function as appositive post-modifiers than relative ones. In fact, further research could be done on the hypothesis that relative clauses are more likely to appear in other forms (i.e., finite wh- or thatclause, or participial clause) than as a to-infinitive.

As can be seen in Table 7, there was one clause found in the newspaper corpus that undoubtedly functions as a post-modifier, yet it was impossible to decide whether it is equivalent to apposition or a relative clause as it has features of both and cannot exclusively be classified as one or the other. This clause can be found in example [46] below.
[46] Conservative-leaning states appealed to the Supreme Court, warning that an increase in migration would take a toll on public services and cause an "unprecedented calamity" that they said the federal government had no plan to deal with. (appendix 2, PM* 26)

The to-infinitive clause in [46] could be interpreted in two ways. One is to consider it a relative post-modifier of the noun phrase plan in which case we could paraphrase it as ...no plan that would deal with it. Alternatively, because of the fact that plan may be considered an abstract noun, one would not be out of bounds to interpret the infinitive as containing information regarding the content of the non-existent plan, i.e., to deal with the calamity. In any case, both
interpretations have their merit and it is impossible to reach a verdict as to which one is correct. That is why the sentence has been marked with an asterisk (*) in the appendix, to highlight its ambiguous nature.

Finally, we should address the restrictiveness of the post-modifying infinitive clauses found in the corpus data. As mentioned in chapter 3.6, restrictive clauses provide essential information about the noun phrase they post-modify and are therefore impossible to leave out, whereas nonrestrictive post-modifiers contain information that is either unnecessary for the full understanding of the sentence or that has already been previously mentioned. Unsurprisingly, no non-restrictive clauses were found, all 74 infinitive post-modifiers in the corpus being restrictive. This is in line with the proposition of Girard and $\operatorname{Kalan}(1999,35-36)$ that infinitive post-modifiers only correspond to restrictive clauses, even going as far as to call infinitives in place of non-restrictive clauses ungrammatical. It is also possible to infer that the use of nonrestrictive post-modifiers would be seen as redundant particularly in newspaper discourse where journalists focus on shortening their text as much as possible and providing only necessary, important information, which is the exact antithesis of what non-restrictive clauses would be used for.

### 4.1.4 Comparative clauses

Comparative to-infinitive clauses, when compared with the three categories discussed in chapters 4.1.1-4.1.3, appeared relatively infrequently in the overall corpus data, with only 8 and 2 occurrences in academic and newspaper discourse respectively. Even when adjusted for the size of the two corpora, comparative to-infinitive constructions are more common in academic than newspaper writing with 0.43 over 0.26 occurrences per 1000 words respectively. Illustrated below are four $t o$-infinitives functioning as part of comparative constructions, two from each corpus.
[47] [a] We should not be too quick to accept this premise. (appendix 1, CC 1)
[b] A modelling study (3) in 2000 established that pre-industrial levels of C[O.sub.2] were high enough to guarantee a period of interglacial conditions for at least 50,000 years (Fig. 1). (appendix 1, CC 4)
[c] Both the federal government and immigration advocates have argued that the states waited too long to intervene and - even if they hadn't waited so long that they don't have sufficient standing to intervene. (appendix 2, CC 1)
[d] Both the federal government and immigration advocates have argued that the states waited too long to intervene and - even if they hadn't waited so long that they don't have sufficient standing to intervene. (appendix 2, CC 2)

It was mentioned that to-infinitives only appear as part of two small sub-categories of comparative clauses, those expressing sufficiency and excess. Both these clause types appeared in the analysis, as can be observed above, where [47a] and [47c] are examples of to-infinitives carrying the meaning of excess licensed by the adverb too, while [47b] and [47d] are infinitivals expressing sufficiency through the use of the adverb enough and adjective sufficient respectively.

Although generally only restricted to adverbs, comparative clauses licensed by adjectives, such as the one in [47d] are also classified within this thesis as expressing sufficiency or excess. This is based on the information presented in Quirk et al. $(1985,1140)$ that sufficient and excessive, as well as their adverbial counterparts sufficiently and excessively, are more formal variants of the adverbs too and enough and to-infinitive clauses licensed by these items should thus be classified as comparative.

It seems that clauses of sufficiency are more frequent than those expressing excess. This proposition is based on the fact that only two clauses, one from academic and the other from newspaper discourse, were licensed by the adverb too. The rest were dependent on enough, sufficient or sufficiently. There does not appear to be any particular reason for this preference of one type over the other though, we might thus consider it purely accidental.

Lastly, the prevalence of comparative clauses in academic over newspaper texts shall briefly be addressed. It is without doubt that clauses of sufficiency and excess have an evaluative function, describing whether something has too much or enough of a certain quality presented by the adjective that serves as the comp-element. One could thus suppose that due to the need of an academic to evaluate the information presented in their work and to make conclusions and interpretations based on this evaluation, comparative clauses would be more common in academic writing than in newspaper reports, where the author is expected to remain rather impartial and merely report on what happened (see chapters 1.1 and 1.2).

### 4.1.5 Adverbial conjuncts

As can be observed in Table 1 in the introductory section of this chapter, to-infinitives functioning as adverbial conjuncts were extremely infrequent in the collected data, tied with adverbial disjuncts (see chapter 4.1.6) at two occurrences each in the overall corpus.

Unsurprisingly, these clauses only appeared in academic discourse, and both can be found in the following example.
[48] [a] To summarize, the few investigated treatment protocols show similarities but emphasize different elements, with concrete behavioral elements possibly being most suitable for people with psychosis. (appendix 1, AC 1)
[b] To take another example, an expansive definition of "religion" for establishment clause purposes would imply that public schools cannot teach divisive secular religions such as wokeness. (appendix 1, AC 2)

As mentioned in chapter 3.3, adverbial conjuncts have a linking function, but they are also comment clauses in that they signal how what follows should be understood. The infinitive in [48a] comments on the fact that the following information is a summary of what preceded in the text before. Similarly, in [48b], the conjunctive clause signals that what comes next is to be understood as another example, implying that what preceded it was a different example, conjoining the two.

As expected, both conjuncts appeared in the initial position. While not a given predisposition, one could argue it is most common for conjunctive elements to be put at the front of a sentence. The fact that both examples of $t o$-infinitive conjuncts appeared in the academic corpus also complies with the information presented in chapters 1.1 and 1.2 that using linking adverbials is only typical of academic texts, with newspaper reporting relying on the logical sequencing of events and the use of time and place adverbials for textual cohesion.

### 4.1.6 Adverbial disjuncts

Similarly to the preceding category although much more surprisingly, adverbial disjuncts were an extremely infrequent category of to-infinitive clauses in the two corpora analyzed, tying conjuncts for last place at two occurrences each. Additionally, just like with conjunctive clauses, both disjunctive to-infinitives appeared in the academic corpus. Both of these clauses are showcased in the example below.
[49] [a] To be sure, a plaintiff can prevail only if the offensive conduct is severe and pervasive. (appendix 1, AD 1)
[b] To be sure, overt discrimination remains technically unlawful, which partly explains why employers shroud their practices in the latest rhetoric of inclusion
recommended by a permanent staff of "diversity" professionals. (appendix 1, AD 2)

As stated in chapter 3.2, to-infinitive disjuncts are comment clauses providing information about the style in which the proposition in the main clause should be understood. It is interesting that both style disjuncts here have exactly the same form to be sure, meaning-wise corresponding to the adverb surely. This is perhaps due to the fact that both appeared within the same text, telling us more about the idiosyncrasies of the author and his preference for using this phrase than anything else.

In terms of their position in a sentence, both disjuncts appeared initially, which is hardly surprising and, similarly to conjunctive clauses discussed in the previous chapter, while it is possible for these clauses to be placed medially and finally as well, one would probably expect most of them to be fronted. What was shocking, however, was the fact that this clause type's frequency in academic texts was so low, as this is where I expected the main contrast between academic and newspaper discourse to occur. Predictably, newspaper reports did not contain any disjunctive clauses as one would expect journalists to remain rather neutral and unbiased in their opinions, merely reporting on what happened (see Biber and Conrad 2009, 113). However, academic writing typically calls for the author's evaluation of the presented information and expression of their views on the subject-matter, the use of disjuncts/comment clauses enabling exactly that. Perhaps, it is simply that disjuncts are uncommon in the to-infinitive form and other forms would appear more frequently. However, a deeper analysis would need to be conducted first in order for this hypothesis to be justifiable.

### 4.1.7 Other

This category subsumes all the clauses that could still be assigned their own sub-type, but it is not one of those described in chapters 3.1-3.6. Namely, to-infinitives functioning as complextransitive complementation of the verb, those in catenative constructions and those that follow prepositions are all classified as "other" in this thesis. We could technically refer to all these items as complements. Table 8 below showcases the frequency of each of these $t o$-infinitive elements in academic and newspaper discourse.

Table 8: Complement clause types

| Complement type | AD | ND | Overall |
| :---: | :---: | :---: | :---: |
| Complex-transitive | 33 | 14 | 47 |
| Catenative | 8 | 6 | 14 |


| Prepositional | 3 | 1 | 4 |
| :---: | :---: | :---: | :---: |
| Overall | $\mathbf{4 4}$ | $\mathbf{2 1}$ | $\mathbf{6 5}$ |

Complex-transitive complementation refers to a situation where the main verb of a sentence is followed by a direct object and then another element, i.e., an infinitive clause, which does not function as an object, it would be more akin to an object complement. At the same time, the direct object of the matrix verb also functions as a subject for the infinitive. What distinguishes these complements from nominal to-infinitive clauses is that the infinitive and its subject can be separated from one another when the subordinate subject is made the subject of the entire sentence through passive paraphrase. Thus, we cannot say that the $t o$-infinitive and its subject form one unit and should rather be seen as two separate elements. (Quirk et al. 1985, 1195)

Quirk et al. $1985(1985,1203)$ provide a list of verbs that allow for the object + to-infinitive complementation and it was according to this data that clauses found in the corpus were classified as belonging to this category. Tables 9 and 10 below contain information about the most frequent verbs that were found licensing complex-transitive complementation by a toinfinitive clause in the academic and newspaper corpus respectively.

Table 9: Complex-transitive complementation in academic discourse

| Verb/s | Number of occurrences |
| :---: | :---: |
| allow | 8 |
| expect | 5 |
| cause <br> require | 3 |
| encourage <br> prepare | 2 |
| compel <br> design <br> enable <br> estimate <br> help <br> know <br> push <br> show <br> think | 1 |


| urge |  |
| :---: | :---: |
| Overall | $\mathbf{3 3}$ |

Table 10: Complex-transitive complementation in newspaper discourse

| Verb/s | Number of occurrences |
| :---: | :---: |
| schedule | 3 |
| allow <br> compel <br> expect <br> force | 2 |
| force <br> help <br> require | 1 |
| Overall | $\mathbf{1 4}$ |

It can be observed here that the verbs appearing with the object + to-infinitive complementation in both corpora are extremely similar. One might hypothesize that the high frequency of infinitive clauses having this complement function is due to the fact they are similar to nominal and adjunctive to-infinitives in that they are essentially complements of the main verb, meaning they also allow the authors to compress a lot of information into one sentence. Two clauses from each corpus illustrating this use of the to-infinitive are listed in example [50] below.
[50] [a] According to Puzzanchera and Ehrmann (2019) of the OJJDP, suicide rates more than doubled over the past decade across all racial and ethnic groups within facility walls, causing youth suicide victims to exceed the annual number of youth homicide victims. (appendix 1, CTC 20)
[b] A conventionally conservative Supreme Court would be expected to hold that hostile work environment law violates the free speech clause. (appendix 1, CTC 23)
[c] Former President Donald Trump is suing the House Committee investigating the Jan. 6 attack on the U.S. Capitol in an attempt to block a subpoena requiring him to testify. (appendix 2, CTC 1)
[d] The summit was originally scheduled to end on Friday, but went well into overtime with negotiators still trying to hammer out the details as the conference venue was being dismantled around them. (appendix 2, CTC 8 )

While [50a] and [50c] are examples of active verb constructions where the direct objects of the matrix verbs, which are simultaneously the subjects of the to-infinitives, youth suicide victims and him respectively are placed before the infinitive clause, the passivization of the matrix verbs in [50b] and [50d] means that the subject of the infinitive, a conventionally conservative Supreme Court and the summit respectively, is moved to the subject position of the entire clause. We can use Table 11 to observe the number of occurrences of this to-infinitive complement type in passive and active sentences.

Table 11: Complex-transitive complementation of active and passive verbs

| Main verb voice | AD | ND | Overall |
| :---: | :---: | :---: | :---: |
| Active | 22 | 5 | 27 |
| Passive | 11 | 9 | 20 |
| Overall | $\mathbf{3 3}$ | $\mathbf{1 4}$ | $\mathbf{4 7}$ |

As is obvious from the data presented in Table 11, to-infinitives function as part of complextransitive complementation with about the same frequency in both active and passive sentences. While these complements appear more commonly with active matrix verbs in academic texts, the exact opposite is true of newspaper reports where it is mainly the passive verbs that carry these complements. Why this is the case though remains to be answered as no conclusive theory regarding this phenomenon could be mapped out.

To-infinitive constructions functioning as catenative complements were the second most frequent category classified as "other" in this thesis, although with 8 and 6 occurrences in academic and newspaper discourse respectively, this clause type is relatively uncommon. As mentioned in chapter 3.4, the verbs that carry to-infinitive catenative complements have the same form as direct object nominal clauses, with the infinitive following directly after the verb. The difference is that catenative verbs are intransitive, meaning they do not allow for an object, and that is why the to-infinitive clause is considered a catenative complement.

The following is a list of catenative verbs that appeared with a $t o$-infinitive complement, with information about which corpus they were found in and how many times in the brackets: fail ( $4 \mathrm{x} \mathrm{ND}, 2 \mathrm{x} \mathrm{AD}$ ), seem ( $1 \mathrm{x} \mathrm{ND}, 2 \mathrm{x} \mathrm{AD}$ ), hope ( $1 \mathrm{x} \mathrm{ND}, 1 \mathrm{x} \mathrm{AD}$ ), appear (1x AD), come (1x AD),
and turn out (1x ND). Examples of clauses from both corpora may be found in the example below.
[51] [a] Key traits of HS-3, including coordinated colony growth, differentiation, and dispersal upon submersion, all appear to be multicellular adaptations to a reliably fluctuating environment -- though Mizuno et al. did not formally test adaptive hypotheses. (appendix 1, CAT 35)
[b] The current study indicates that such a structured program including concrete behavioral elements and practical exercises that are easily integrated into patients' daily lives seems to be suitable for patients with psychosis. (appendix 1, CAT 37)
[c] Researchers also hope to test the method in those suffering from different stages of memory loss in future studies. (appendix 2, CAT 17)
[d] Faes' second own-goal stemmed from Nunez's missed one-on-one, and he failed to make more chances count later in the day. (appendix 2, CAT 20)

According to Quirk et al. $(1985,146)$, catenatives typically contain meanings which are related to aspect or modality. The modal function is obvious with verbs like seem or appear, which are used as mitigation techniques withholding complete commitment on the part of the author as far as the truth of the statement is concerned. Other verbs, however, such as hope, turn out or fail seem to be closer on the gradience scale to full verbs. They do still contain some sort of a comment on how the rest of the sentence should be understood, with hope expressing a level of uncertainty and turn out or fail carrying a meaning of outcome. We can thus conclude that catenative constructions are either used as hedging devices or evaluative items.

The last kind of $t o$-infinitive construction that was included in the "other" section of this thesis is that functioning as a complement of a preposition. It should be mentioned here that not only infinitives that are embedded within a prepositional phrase but also those found with prepositional verbs are covered in this category. Even though the latter could be classified as prepositional objects and thus included in the chapter on nominal clauses, it has been decided that because it is the preposition that licenses the to-infinitive, such clauses would be subsumed here under the heading of prepositional complement. As there were only four occurrences found in the overall corpus data, three in academic and one in newspaper discourse, they are all listed in example [52] below.
[52] [a] I leave aside the stimulating debates over whether to abandon [originalism] or [whether to] modify originalism. (appendix 1, PC 42)
[b] There was another principal school of thought on how best to help the freed
Blacks carve a niche in the new society--by focusing on the trades. (appendix 1, PC 44)
[c] Alstott will, of course, be pulling for his Bucs to beat Alexander's Seahawks, and he said Tom Brady's 55th game-winning drive of his career last week against the Los Angeles Rams is the spark needed to put them on a run moving forward. (appendix 2, PC 21)

The two coordinated $w h$-infinitive clauses in [52a] are both dependent on the preposition over in the post-modification of the noun phrases debates. The same can be said about the howclause in [52b], which is embedded within a prepositional phrase with on as its head that postmodifies the noun phrase school of thought. The sentence in [52c] is specific in that while the to-infinitive clause is dependent on the preposition for that is part of the prepositional verb pull for, it resembles adverbial adjuncts and nominal clauses in that its subject is present and licensed by the preposition for. However, because the only interpretation that makes sense is that of pull for as one unit, not pull as the main verb and for as the element introducing the subject of the infinitive, the clause has been classified as a prepositional complement. No tendencies as far as the use of to-infinitives after prepositions could be observed due to the extreme infrequency of this clause type.

### 4.1.8 Indeterminate

This chapter serves to briefly address those clauses that could not be classified as belonging to any of the categories discussed in 4.1.1-4.1.7 either because they could be interpreted dually and are therefore stuck between two clause types or because they simply were so unique that their classification was impossible. Talking about such examples on a one-by-one basis would be redundant. Instead, indeterminate clauses were clustered into several groups based on shared similarities. Table 12 illustrates these groups, listed from most to least frequent.

Table 11: Indeterminate clauses

| Type of IND | AD | ND | Overall |
| :---: | :---: | :---: | :---: |
| PM $^{*}$ vs. AAP | 12 | 8 | 20 |
| CTC vs. NCO $^{2}$ | 7 | 3 | 10 |


| Other | 2 | 4 | 6 |
| :---: | :---: | :---: | :---: |
| Completely IND | 5 | 4 | 9 |
| Overall | $\mathbf{2 6}$ | $\mathbf{1 9}$ | $\mathbf{4 5}$ |

Most commonly, to-infinitive clauses that are classified as indeterminate in this thesis were stuck between a post-modifier and an adverbial adjunct interpretation. This was mostly due to the fact that such to-infinitives followed noun phrases and could thus be seen as postmodification while simultaneously carrying a meaning akin to purpose. A few examples of such clauses may be found below.
[53] [a] While several EU countries are taking steps to accelerate their transition to renewable energy in response, and the EU plans to reduce its Russian reliance and increase investment in renewables, its continued need for Russia for energy has helped finance the country's ongoing military incursion. (appendix 1, IND 5)
[b] In the latest study, researchers developed a new technique to selectively detect brain derived (BD)-tau while avoiding free-floating "big tau" proteins produced by cells outside the brain. (appendix 2, IND 6)
[c] The Biden administration still has considerable leeway to enforce Title 42 as aggressively or as leniently as it chooses. (appendix 2, IND 8)

In [53a], the to-infinitive follows the abstract noun phrase steps, therefore it could be interpreted as an appositive post-modifier giving information as to what those steps entail. On the other hand, the clause could alternatively be seen as containing the purpose for taking such steps. [53b] is similar, except here the infinitive clause is more likely to be interpreted as being equivalent to a relative clause, i.e., that selectively detects brain derived (BD)-tau, while also having an adjunctive purpose meaning. The sentence in [53c] is unique in that it is up to each person to decide whether the post-modifier sense is that of relative constructions or apposition. Nevertheless, the indeterminacy is still between adverbial adjunct clause or a noun phrase postmodifier.

The second most frequent group of indeterminate to-infinitive clauses appearing in the corpus data was that of constructions that could be interpreted as either complex-transitive complementation of the verb or as a direct object. The indeterminacy here stems from the verb in most cases being related to speech acts. As mentioned in chapter 3.1.1, most speech act verbs
are interpreted as carrying a direct object, which typically contains the content of the speech act, i.e., what was actually said. However, there are some cases where this interpretation seems rather illogical.
[54] [a] Most recently, President Putin vowed to deploy a new nuclear-capable missile he said could reach the United Kingdom in 3 minutes. (appendix 1, IND 17)
[b] On Saturday, EU officials threatened to walk out of the meeting if the final agreement failed to endorse the goal to limit warming to 1.5 degrees Celsius above pre-industrial levels. (appendix 2, IND 9)
[c] Schemas help to organize information and allow to take shortcuts in interpreting a vast amount of information. (appendix 1, IND 13)

In both [54a] and [54b], the verbs vow and threaten stand in for a speech act, with the infinitive clause expressing what specifically was said. However, it almost feels as if there should have been another element inserted in between the verbs and the subordinate clauses, that of an indirect object. We could infer that the object has been left out due to it being a general noun such as us, them, the people, the public, etc. However, the probable omission of this item has resulted in the clause resembling complex-transitive to-infinitive complements (see chapter 4.1.7). [54c] is included here for a similar, but not yet quite the same reason. Allow is not a speech act verb, but it normally permits only complex-transitive complementation. However, because the direct object of the main verb (which is also the subject of the infinitive) is omitted, the $t o$-infinitive clause lends itself to a direct object interpretation. To sum up, the clauses listed here are all prone to dual interpretation.

There was a number of clauses found in both the academic and newspaper corpus that showed some other kind of ambiguity when it comes to their interpretation than the two types discussed so far in this chapter. They are all listed in the following example.
[55] [a] In contrast to yeast, in dopaminergic neurons that have activated the proposed alternative energy pathway, complex IV is still available to polarize the mitochondrial membrane. (appendix 1, IND 20)
[b] I wish only to show that a conventional right-wing jurisprudence--whether described as "originalist" or not--on a select number of questions is a mortal threat to the regime. (appendix 1, IND 21)
[c] "It's a great experience for the people of Germany, and people to come out here and [to] support the NFL and their teams." (appendix 2, IND 12)
[d] "We are deeply disappointed for all the desperate asylum seekers who will continue to suffer because of Title 42 , but we will continue fighting to eventually end the policy," said Lee Gelernt, a lawyer with the American Civil Liberties Union, which had been arguing to end Title 42's use. (appendix 2, IND 14)
[e] After China froze climate negotiations between the two countries this summer, US President Joe Biden and China President Xi Jinping agreed to reestablish US-China communications when they met last week at the G20 summit in Bali, paving the way for Kerry and his Chinese counterpart Xie Zhenhua to meet again formally. (appendix 2, IND 15)

The to-infinitive in [55a] borders on an adjectival complement and an adverbial adjunct interpretation. Because the main clause contains the adjective available, it seems only logical that the following infinitival clause functions as its complement. However, in this case, it seems that the infinitive carries a strong sense of purpose. It has thus been decided to classify this clause as indeterminate. The verb wish in [55b] could be considered either a full verb or as more akin to catenatives. Therefore, the infinitive clause that follows it could be interpreted as either a direct object or a catenative complement. The sentence in [55c] contains two to-infinitive clauses that are coordinated. It is constructed so poorly, however, that it is impossible to decide whether they function as extraposed subject clauses or as relative post-modifiers of the noun phrase people. In [55d], the speech act verb argue could be seen as carrying a direct object in the form of an infinitive clause. However, one might infer that the non-finite construction carries more of a meaning of purpose, hence its indeterminacy. Lastly, it is unclear whether the infinitive in [55e] should be interpreted as an adverbial clause, in which case the noun phrases Kerry and his Chinese counterpart Xie Zhenhua would be included as a subject introduced by the preposition for, or whether the idiomatic phrase pave the way for carries a prepositional object and the to-infinitive should be seen as complex-transitive complementation.

Finally, it is important to state that there was a couple of $t o$-infinitive clauses whose function and meaning were impossible to gauge. It is perhaps possible that some of these constructions should not have been included in the analysis as they may not equate to clausal material at all and are more like modal or semi-modal verb phrases. They can all be found listed below.
[56] [a] Education to Reduce Recidivism (appendix 1, IND 22)
[b] Therapeutic Writing to Address Literacy, Mental Health, and Recidivism (appendix 1, IND 23)
[c] Further, to bolster their bona fides should they be sued, employers make sure to adopt the latest ideological fashions. (appendix 1, IND 24)
[d] Food insecurity--not having enough food to live an active, healthy life-- can exacerbate conflict by increasing tensions among groups that are competing to control the resources needed for food production. (appendix 1, IND 25)
[e] Meanwhile, South Sudan is set to experience its worst hunger emergency in history as food supplies dry up in the lean period. (appendix 1, IND 26)
[f] Negotiators from nearly 200 countries at the COP27 UN climate summit in Egypt took the historic step of agreeing to set up a "loss and damage" fund meant to help vulnerable countries cope with climate disasters and agreed the globe needs to cut greenhouse gas emissions nearly in half by 2030. (appendix 2, IND 16)
[g] "The coalition has held because of this conviction that we did need to stay together to deliver this - and to push the conversation." (appendix 2, IND 17)
[h] Sandhurst urged to tackle 'toxic culture' of sexual assault (appendix 2, IND 18)
[i] Gakpo entering the frame will only boost the Reds' prospects, with Luis Diaz and Diogo Jota also to return from injury. (appendix 2, IND 19)

A lot of the to-infinitive clauses listed in [56] are part of incomplete clausal constructions. Especially in the case of headlines (i.e., [56a], [56b] and [56h]), the infinitive seems to have kind of a modal meaning, in the first two cases expressing a future time reference similar to that expressed by the modal verb will and in the latter case together with the verb urge carrying a meaning like that of should. In [56g], the infinitive clause is in the form of a parenthetical comment, and it is impossible to decide whether it is related to the main clause the coalition has held or whether it should be taken as a coordinate of the infinitive to deliver this or possibly the other infinitival construction to stay. Examples [56e] and [56i] also contain infinitives carrying a future time reference, i.e., something that should happen in the future. The other clauses offer very little to work with and their interpretation is thus completely unclear.

### 4.2 Summary of the main findings

This chapter serves to summarize the major findings of the analysis conducted for the purposes of this thesis. As mentioned earlier, the focus was on the occurrence of to-infinitive constructions in academic and newspaper texts, with the main goal of figuring out whether infinitive clauses appear more frequently in the former or in the latter discourse. To sum up, while academic writing contained more instances of to-infinitive clauses, this was mainly due to the fact that the academic corpus was twice as large in size. When adjusted for corpus size, it was actually the newspaper texts that showed a higher frequency of occurrences of toinfinitive clauses, with 24 clauses per 1000 words over 15 in academic discourse.

Nominal clauses were the most frequent functional category of $t o$-infinitives in both corpora. The reason for this high frequency of nominal infinitive clauses is that they serve a compressing function, allowing authors of both academic and newspaper texts to reduce the number of sentences used while simultaneously avoiding repetition of the same information over and over again. When it comes to sub-types of nominal clauses, to-infinitives functioning as object or subject made up most of the corpus data, with subject complement and adjectival complement being relatively infrequent. One interesting finding related to infinitive noun clauses functioning as subject or object in academic discourse was that, when they appeared in extraposition, the anticipatory subject/object "it" was always followed by a subject/object complement in the form of an adjective.

To-infinitive adverbial adjuncts were the second most frequent category, either containing the temporal setting/result of or the motivation for the event in the main clause. Out of these two sub-types, purpose clauses were by far the more common category in both corpora, similarly to noun clauses having a reducing function. In terms of position, purpose adjuncts in the initial position were relatively infrequent, although it was found that particularly in academic discourse, it is a common practice to front these clauses when describing the methodology used in the piece of writing, with the to-infinitive containing the desired result and the main clause providing the research method. Temporal result clauses, on the other hand, were more frequent in newspaper discourse, particularly in texts dealing with sports or legal proceedings.

Infinitive clauses functioning as post-modifiers in noun phrases were the last objectively frequent category in both corpora. As mentioned earlier, most of the post-modifiers were those similar to appositive constructions, providing more concrete description of abstract noun phrases. Relative to-infinitive post-modifiers, on the other hand, were highly uncommon, and it may thus be surmised that relative clauses are more frequent in finite or participial forms. In terms of restrictiveness, no non-restrictive post-modifiers were found and we can suppose this
is due to the fact that the information typically encompassed in such clauses is redundant and there is no room for that in the two discourse types analyzed, especially in the case of newspaper reporting.

Other categories of $t o$-infinitive clauses were relatively infrequent. Comparative clauses of sufficiency and excess, which contain the to-infinitive construction, were more common in academic texts than in newspaper reports. This is due to the fact that they mainly have an evaluative function, evaluation of data being one of the main conventions of academic writing. Similarly, both adverbial disjuncts and conjuncts appeared more frequently in academic discourse, with the formal also being a means of evaluation and the latter providing links between parts of text.

Lastly, there were several clauses that did not fit into the classification mapped out in the theoretical part of this thesis and they were thus either put in the "other" category or simply labeled "indeterminate." The "other" section includes the frequent complex-transitive toinfinitive complement clauses, with their high frequency also attributed to their function as compression devices, then the catenative complements and complements of prepositions. The "indeterminate" category then contains all the clauses whose interpretation is either dual or unclear.

## Conclusion

This diploma thesis titled The Use of Infinitives in Academic and Newspaper Discourse dealt with the analysis of the occurrence of $t o$-infinitive constructions within academic and newspaper texts and tried to explain the prevailing tendencies in relation to the typical features of the two discourse types. For these purposes, 20 texts, ten from each register, were collected off online websites. The to-infinitives within these articles were then analyzed and classified into several categories, the results of which may be found in appendices 1 and 2 for academic and newspaper discourse respectively.

The thesis was divided into a theoretical and a practical part. In the theoretical section, the most common features of academic and newspaper discourse were defined first, with focus on the information that would be useful for the analysis conducted presently. Chapter 2 then described the basic differences between finite and non-finite verbs forms, with sub-chapters 2.1-2.3 addressing the non-finite participial and gerund forms in more detail. Chapter 3 was then dedicated in its entirety to infinitives, specifically discussing the bare infinitive/to-infinitive dichotomy, the morphology of infinitive structures and their function as condensing devices. Finally, in sub-chapters 3.1-3.6, the most frequent clausal categories of to-infinitives were addressed in detail.

The theoretical data was then used for the analysis, the results of which can be found in the practical part of this thesis, i.e., chapter 4. In the introductory section 4.1, the overall results were outlined. Sub-chapters 4.1.1-4.1.6 then discussed the $t o$-infinitive clauses found in the corpus data that corresponded to the six major categories defined in chapter 3 of the theoretical section. The last two subchapters, i.e., 4.1.7 and 4.1.8, then focused on the clauses from the corpus that did not fit the classification mapped out in the theoretical part of the thesis, and thus had to be classified as either "other" or "indeterminate." The major findings of the analysis were then summarized in chapter 4.2.

In conclusion, it was found that to-infinitive clauses are nearly twice as common in newspaper reports as they are in academic writing, which can be attributed to their function as tools for syntactic compression, i.e., something of the utmost importance to journalists who have to fit a lot of information into a limited amount of space. Academic discourse, on the other hand, does not necessitate compression as much, infinitives mainly employed when their use means more precise definition of the key concepts at hand.

## Resumé

Tato diplomová práce se zaměřuje na analýzu infinitivních vět objevujících se v akademických a novinových článcích. Cílem je zjistit, ve kterém ze zmiňovaných diskurzů se tyto věty objevují častěji a proč tomu tak je. Za tímto účelem bylo nashromážděno 20 článků, z nichž 10 bylo akademických a 10 novinových. Aby byla analýza co nejpřesnější a výsledky co nejpoužitelnější, bylo rozhodnuto, že se musí sesbírat takové texty, které budou mít porovnatelnou délku. Proto se akademický korpus skládá z esejí, studií a článků objevujících se v akademických časopisech. Delší typy textů jako bakalářské, diplomové nebo disertační práce jsou z analýzy vynechány. Novinový korpus se poté skládá z novinových zpráv. Oba tyto korpusy můžete nalézt v přílohách A a B.

Práce je rozdělena na teoretickou a praktickou část. Samotná teorie je pak rozdělena do tří kapitol. V první kapitole jsou nejdříve vydefinovány základní funkce a rysy akademického a novinového diskurzu. Důraz se kladl na takové poznatky, které by se poté daly využít v praktické analýze. Vzhledem $k$ tomu, že podkapitola 1.1 se detailně věnuje akademickému diskurzu, je poté kapitola 1.2 psána tak, aby nebyl novinový diskurz pouze popsán, ale nýbrž i porovnán s rysy akademických textů.

Druhá kapitola teoretické části této diplomové práce se poté zabývá rozdílem mezi finitními a nefinitními slovesnými tvary. Hlavní odlišnosti jsou nejdříve popsány v úvodu této kapitoly s tím, že v podkapitolách 2.1-2.3 je poté věnován prostor třem nefinitním slovesným tvarům, konkrétně jsou to příčestí minulé, prríčestí přítomné a gerundium. Je tomu tak, nebot' se celá práce zabývá nefinitním tvarem a to infinitivem, a tudíž je nutné se letmo věnovat čas i ostatním nefinitním slovesům.

Ve třetí kapitole je detailně popsán infinitiv jako takový. Nejprve se kapitola věnuje morfologii a základním rysům tohoto slovesného tvaru. Poté je vymezen rozdíl mezi anglickým infinitivem s a bez částice „to." Protože tato diplomová práce má za cíl analýzu větných celků, v nichž se objevuje infinitiv, jeho forma bez částice „to" je popsána pouze okrajově a kvůli jejímu málo častému použití při tvorbě vedlejších vět bylo rozhodnuto, že součástí analýzy budou pouze toinfinitivní věty. Nutně je tedy vydefinována i stavba to-infinitivu. Nakonec je čas věnován kondenzační funkci infinitivních vět.

Podkapitoly 3.1-3.6 mají za cíl detailně popsat jednotlivé typy vedlejších vět, v nichž je použit infinitiv. Konkrétně je prostor věnován větám příslovečným, obsahovým, vztažným a komparativním. V podkapitole 3.1 jsou popsány věty příslovečné s adjunktivní funkcí, které
jsou poté dále rozděleny na věty účelové a časově výsledkové. Kapitoly 3.2 a 3.3 poté popisují další dva typy adverbiálních infinitivních vět, a to ty s funkcí disjunktivní a konjunktivní. Obsahové infinitivní věty jsou poté vydefinovány v podkapitola 3.4, kde jen věnován prostor nejen podkategoriím tohoto větného typu (tzn. věty předmětné, podmětné, doplňkové), ale také větným konstrukcím, které se obsahovým větám podobají, jejich klasifikace však není zcela jasná. V kapitolách 3.5 a 3.6 je poté věnován prostor popisu vět s post-modifikační funkcí (tzn. věty vztažné a apozitivní) a větám komparativním.

Praktická část této práce může být nalezena ve čtvrté kapitola. Ta nejprve popisuje metodologii a přístup k analýze. Teoretické poznatky z prvních tří kapitol byly využity ke klasifikaci vět nalezených ve výše zmiňovaných akademickým a novinových článcích do větných kategorií vydefinovaných ve třetí kapitole této práce. Akademické texty byly nalezeny pomocí internetové databáze GALE, původně se však objevily v následujících akademických časopisech: American Jewish History, BMC Psychiatry, Diverse Issues in Higher Education, eLife, First Things: A Monthly Journal of Religion and Public Life, Journal of Correctional Education, Nature, Nature Neuroscience, a The Wilson Quarterly. Novinové články poté byly staženy z následujících online novinových stránek: AP News, BBC News, CNN, Daily Express, New York Post, The Guardian, The Huffington Post, The Independent, The Sun, a The Telegraph. Cílem bylo sesbírat alespoň 400 infinitivních vět, což se povedlo, nebot' celkový korpus se skládá ze 457 větných konstrukcí.

V úvodní kapitole 4.1 jsou zesumírované celkové výsledky analýzy. Zatímco více infinitivních vět bylo nalezeno v akademických článcích, při přepočítání výskytu na 1000 slov se ukázalo, že infinitivní vedlejší věty jsou téměř dvakrát tak časté v novinovém diskurzu jako v tom akademickém. Výsledky jsou zkresleny celkovou velikostí jednotlivých korpusů, kdy akademický korpus je téměř třikrát tak velký jako ten novinový. Podkapitoly 4.1.1-4.1.8 se poté věnují jednotlivým větným typům vydefinovaným ve třetí kapitole této práce, ale také větám, které nebylo možné zařadit ani do jedné z těchto větných kategorií.

Obsahové věty, jakožto nejčastěji se objevující infinitivní větné konstrukce, jsou analyzovány v kapitole 4.1.1. Důvodem jejich častého výskytu je fakt, že jsou často využívány jako kondenzační prostředky, čímž umožňují autorům jak novinových, tak i akademických článků zhustit velké množství informací do co nejmenšího prostoru a zároveň se vyhnout opakování se. Co se týče konkrétních typů obsahových vět, tak nejčastěji používanými jsou věty podmětné a předmětné. Zajímavým zjištěním poté bylo, že u infinitivních vět s nominální funkcí podmětu
nebo předmětu nalezených v akademickém korpusu, pokud se objevily v extrapozici, byl jejich referent „it" následován doplňkem ve formě přídavného jména.

Adverbiální infinitivní věty s adjunktivní funkcí byly druhou nejčastější větnou kategorií ve studovaných typech diskurzu. Z výše zmiňovaných typů infinitivních adjunktů byly častější věty účelové, které podobně jako věty obsahové mají redukční syntaktickou funkci. Zajímavé bylo zjištění, že pokud se tyto věty objevily na začátku souvětí, bylo tomu tak především při popisování metodologie použité při výzkumu v akademických článcích, kde věta infinitivní popisuje kýžený výsledek, zatímco věta hlavní obsahuje dané kroky/metody využité k dosažení tohoto cíle. Věty časově výsledkové byly častějsí v novinovém diskurzu, především v novinových článcích týkajících se sportu.

Infinitivní věty s post-modifikační funkcí v nominálních konstrukcích byly poslední objektivně častou kategorií infinitivních vět. Většina těchto infinitivů měla funkci apozitivní, tzn. vět, které poskytují abstraktním podstatným jménům konkrétnější význam. Vztažné infinitivy byly poté převážně vzácné a dá se tak předpokládat, že vztažné věty ve formě infinitivní jsou nečasté a spíše se objevují ve finitní či participiální formě. Všechny věty s post-modifikační funkcí byly určující. Můžeme tedy předpokládat, že neurčující infinitivy objevující se v post-modifikaci podstatných jmen jsou v analyzovaných diskurzech považovány za zbytečné.

Zbylé typy infinitivních vět se v korpusu objevovaly relativně málo. Komparativní věty, v nichž se objevuje infinitiv, byly častější v akademickém diskurzu, a to zřejmě proto, že mají hodnotící funkci a hodnocení prezentovaných dat je jedním z hlavních znaků akademického psaní. Adverbiální infinitivy s disjunktivní a konjunktivní funkcí byly také častější v akademickém korpusu, kde dříve zmiňované mají rovněž hodnotící funkci, zatímco druhý zmiňovaný typ funguje jako spojka mezi dvěma částmi textu.

V korpusech byly nalezeny i takové věty, které se nedaly zařadit ani do jedné z kategorií vydefinovaných v třetí kapitole teoretické části této diplomové práce. Prostor jim je věnován v kapitolách 4.1.7 a 4.1.8. První zmiňovaná kapitola se zabývá větami s označením „jiné." Sem spadají doplňkové věty, které nebylo možné začlenit nikam jinam. V podkapitole 4.1.8 jsou poté analyzovány věty, jejichž klasifikace je nejasná, nebot' je bud’ možné interpretovat je dvojím způsobem, nebo je jejich interpretace zcela nemožná.

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## Appendix A - Academic corpus

List of source material:

Text A: Illuminating a new path to multicellularity [eLife] (https://link.gale.com/apps/doc/A721911831/AONE?u=cdv\&sid=bookmarkAONE\&xid=d30bcd84)

Text B: Cognitive behavioral group treatment for low self-esteem in psychosis: a proof of concept study [BMC Psychiatry]
(https://link.gale.com/apps/doc/A686447643/AONE?u=cdv\&sid=bookmarkAONE\&xid=bf8a74f6)

Text C: The cost of changes in energy use in a warming world [Nature] (https://link.gale.com/apps/doc/A680239839/AONE?u=cdv\&sid=bookmarkAONE\&xid=1c1c385e)

Text D: Introduction: Sexuality in American Jewish History [American Jewish History] (https://link.gale.com/apps/doc/A657476892/AONE?u=cdv\&sid=bookmarkAONE\&xid=e84ee6a4)

Text E: Dopamine fuels its own release [Nature Neuroscience]
(https://link.gale.com/apps/doc/A609639361/AONE?u=cdv\&sid=bookmarkAONE\&xid=a9efa873)

Text F: Earth's narrow escape from a big freeze [Nature] (https://link.gale.com/apps/doc/A440059137/AONE?u=cdv\&sid=bookmarkAONE\&xid=ed7de693)

Text G: The Effects of Therapeutic Writing on Juvenile Justice Populations [Journal of Correctional Education]
(https://link.gale.com/apps/doc/A706570508/AONE?u=cdv\&sid=bookmarkAONE\&xid=f30c461d)

Text H: Defeating the equity regime [First Things: A Monthly Journal of Religion and Public Life] (https://link.gale.com/apps/doc/A702047966/AONE?u=cdv\&sid=bookmarkAONE\&xid=d3e38fbf)

Text I: The Urgency of Opportunity: Russia's War on World Resources [The Wilson Quarterly] (https://link.gale.com/apps/doc/A711824774/AONE?u=cdv\&sid=bookmarkAONE\&xid=703cebed)

Text J: Finding roots: the reconstruction era of 1866 to 1868 set the foundation for higher education for Blacks in the South and the nation [Diverse Issues in Higher Education] (https://link.gale.com/apps/doc/A444712164/AONE?u=cdv\&sid=bookmarkAONE\&xid=5e19d4b9)

Adverbial adjuncts:

1) These included chain-forming cyanobacteria that formed softball-sized spheres, packs of bacteria hunting mobile prey together, and filamentous bacteria dividing labor to saturate their growth substrate with antibiotics (AAP; text A) to protect their aerial spores from threats as they develop (Dodds et al., 1995 (2); Fortezza et al., 2022 (5); Zhang et al., 2020 (10)).
2) These included chain-forming cyanobacteria that formed softball-sized spheres, packs of bacteria hunting mobile prey together, and filamentous bacteria dividing labor to saturate their growth substrate with antibiotics to protect their aerial spores from threats as they develop (AAP; text A) (Dodds et al., 1995 (2); Fortezza et al., 2022 (5); Zhang et al., 2020 (10)).
3) Using the presence of specific traits to define this evolutionary transition (AAP; text A) often fails to be sufficiently general; instead, it may be more accurate to use evolutionary dynamics as an indicator.
4) Before the start (T0) and after the 9 -session group therapy (T1), participants completed three questionnaires to determine the treatment effect (AAP; text B).
5) First, patients receive psycho-education, and the costs and benefits of negative and positive self-beliefs are discussed to increase motivation for change (AAP; text B).
6) Throughout the intervention, this positive self-belief is measured to monitor progress (AAP; text B).
7) Two-sided paired samples t-tests were performed for each of the outcome variables on all complete cases (patients who completed both the T0 and T1 assessment) to examine the effect of the group therapy on levels of (positive and negative) selfesteem and depression symptomatology (AAP; text B).
8) Future studies including a larger sample size, a control group, and follow-up assessments are warranted to allow for a more definite conclusion about the longterm benefits of the investigated group therapy (AAP; text B).
9) The authors combine historical annual income and energy-consumption data from 146 countries with daily temperature and rainfall data at $0.25^{\circ} \times 0.25^{\circ}$ resolution, to estimate how global energy consumption will change in response to temperature and income variation (AAP; text C).
10) A key advance is the application of econometric tools -- statistical methods commonly used in economics to estimate causal influences (AAP; text C) -- to isolate the effects of temperature, income and climate on energy expenditure from the effects of other factors.
11) A key advance is the application of econometric tools -- statistical methods commonly used in economics to estimate causal influences -- to isolate the effects of temperature, income and climate on energy expenditure from the effects of other factors (AAP; text C).
12) Rode et al. combined their temperature-energy-expenditure relationships with projections from climate and socio-economic models to estimate the effects of climate change on energy consumption throughout the twenty-first century (AAP; text C) (Fig. 1).
13) Landers had published a column encouraging a gay man to seek counseling in order to "accept himself (AAP; text D)."
14) In "The Cost of Labor: Lillian Wald, Maternal Health, and the Politics of Birth Control," for instance, Hannah Greene demonstrates how Wald's middle-class Jewish background informed her advocacy for birth control and determined the rhetorical strategies she used to fight for its legality (AAP; text D).
15) When Wald argued that women needed contraceptives in order to become better mothers (AAP; text D), she drew upon the maternalist sensibilities that offered Jewish women a path to respectability within the larger, Christian-dominated women's movements of the early twentieth century.
16) Wald harnessed these same maternalist principles to justify women's involvement in an array of social welfare projects (AAP; text D), as well as her own personal rejection of nuclear domesticity in favor of passionate same-sex relationships with other social reformers.
17) To determine whether MAO produces or reduces neurotoxicity, and by what mechanisms (AAP; text E), https://doi.org/10.1038/s41593-019-0556-3 of Nature Neuroscience, Graves and colleagues ${ }^{2}$ carried out a series of experiments in mouse and human dopaminergic neurons.
18) To figure this out (AAP; text E) the authors expressed the ROS sensor in the mitochondrial matrix and found that the activity of the endogenous MAO on the outer mitochondrial membrane was now 'seen' because ROS was being produced inside the mitochondria.
19) To track where the electrons from dopamine metabolism go inside the mitochondria (AAP; text E), the authors inhibited complex III and the adenine nucleotide translocase (ANT).
20) To investigate whether the phasic firing in axons benefited from the MAOmitochondrial pathway to meet these bioenergetic challenges (AAP; text E), the authors mimicked phasic firing by electrically stimulating the dopaminergic axons.
21) To investigate whether the phasic firing in axons benefited from the MAOmitochondrial pathway to meet these bioenergetic challenges (AAP; text E), the authors mimicked phasic firing by electrically stimulating the dopaminergic axons.
22) In contrast, to mimic dopaminergic stress (AAP; text E), the authors gave a highfrequency train of stimuli and found that axonal ATP levels, measured by the ATP biosensor Perceval HR, decreased; MAOB inhibition exacerbated this effect, and the ATP synthase inhibitor oligomycin almost completely depleted axonal ATP, emphasizing the role of mitochondria in energy supply during repetitive axonal firing (Fig. 1).
23) A single pulse did not require MAOB, presumably because cytosolic dopamine did not get high enough or because glycolysis could be used to support vesicle recycling (AAP; text E).
24) However, the negatives of using dopamine metabolism for energy production are clear: (1) there is a decrease in the availability of dopamine for packaging into synaptic vesicles, (2) ROS is produced at mitochondria by $\mathrm{H}_{2} \mathrm{O}_{2}$ production, adding to the normal burden of mitochondrial ROS, and (3) the mitochondrial membrane
potential is less polarized than it would be if all the complexes were in use, and therefore energy that would be used otherwise to make ATP (AAP; text E) is sacrificed.
25) Why are such compromises advantageous in the dopaminergic neuron, and what aspects of the new metabolism could be used to mitigate these deficits (AAP; text E)?
26) They are known to readily rely on a single-subunit enzyme to oxidize NADH (AAP; text D).
27) It would help if complex IV was significantly upregulated in terms of both protein amount and activity level ${ }^{6}$ to counteract the lack of complex I-III activity (AAP; text E).
28) To calibrate the equation (AAP; text $\mathbf{F}$ ), the authors performed several simulations that differed by the value of a parameter that controls cloud height in their model.
29) This sampling process effectively generates a family of model versions, which the authors tested to see which ones predicted past glacial inceptions (AAP; text F).
30) Only the parameter values that yielded correct simulations of all past glacial inceptions were used to establish the equation (AAP; text F).
31) But for this absorption to occur (AAP; text F), carbonate minerals in the ocean will need to be dissolved, to counteract the increase in ocean acidity that occurs when C[O.sub.2] is absorbed, and which limits the amount of C[O.sub.2] that can be dissolved.
32) But for this absorption to occur, carbonate minerals in the ocean will need to be dissolved, to counteract the increase in ocean acidity (AAP; text F) that occurs when C[O.sub.2] is absorbed, and which limits the amount of C[O.sub.2] that can be dissolved.
33) To provide better predictions (AAP; text F), we need to pay special attention to climate processes that are currently not well quantified.
34) Therapeutic writing, also known as expressive writing, encourages youth to write about stressful or traumatic experiences and their associated emotions in order to help them process their feelings (AAP; text G) and gain more control over their mood responses and self-reflection.
35) Therapeutic writing, also known as expressive writing, encourages youth to write about stressful or traumatic experiences and their associated emotions in order to help them process their feelings and [in order to help them] gain more control over their mood responses and self-reflection (AAP; text G).
36) More studies should be conducted accounting for the unwilling youth in order to study that possible correlation (AAP; text G).
37) To address this limitation (AAP; text G), administrators can take certain steps to increase willingness in nonparticipants through "advertising" or word of mouth among the residents in the facilities.
38) Future research should focus on analyzing the outcomes of interventions that include strictly creative writing to best gauge their effectiveness (AAP; text G).
39) Universities boast multiple grievance studies departments and pledge tens of millions to increase faculty diversity (AAP; text $\mathbf{H}$ ), while their administrators--many of
them answerable to student demands for adherence to the principle of equity-outnumber faculty.
40) Whatever the causes, which are probably deep and intractable, disparities among different groups have outlasted all the policies--from affirmative action and social handicaps to expulsion, dispossession, and massacre--ever adopted to erase them (AAP; text H).
41) By the principle of equity, for example, colleges and professional schools should suspend the admission of whites for at least a generation, businesses should declare a moratorium on white male advancement, judges should favor the party who has more "intersectional" credit, and a special racial tax should be imposed to fund reparations (AAP; text H).
42) To do so (AAP; text H), the Court need only follow through on a small number of constitutional reappraisals of civil rights doctrine that it developed in the decade and a half after the passage of the Civil Rights Act in 1964, reappraisals that already enjoy wide acceptance in the conservative legal establishment.
43) Further, to bolster their bona fides should they be sued (AAP; text H), employers make sure to adopt the latest ideological fashions.
44) To be effective (AAP; text H), the Supreme Court's holding must limit the power of Congress, state and local governments, and administrative agencies to revive hostile environment claims.
45) To avoid disparate impact claims (AAP; text $\mathbf{H}$ ), employers must monitor the race, ethnicity, sex, and sexual orientation of their employees to keep numbers up for those in protected classes.
46) To avoid disparate impact claims, employers must monitor the race, ethnicity, sex, and sexual orientation of their employees to keep numbers up for those in protected classes (AAP; text H).
47) To counter the inevitable backlash (AAP; text H), the Supreme Court must give Americans the weapons they need to stop quota-driven discrimination altogether.
48) To counter the inevitable backlash, the Supreme Court must give Americans the weapons they need to stop quota-driven discrimination altogether (AAP; text H).
49) For a university to defend against a claim of an equal protection violation (AAP; text H), the Court should hold that it must disclose how many slots are available for which categories of admission, such as legacies, athletes, residents of particular areas, and children of major donors, as well as the academically gifted.
50) Likewise, a defense must also require disclosure of what facially race-neutral methods, criteria, or formulae are applied to fill each category and the class as a whole (AAP; text H).
51) But do not let them continue to employ the coercive powers of the state to impose their vision on others (AAP; text H).
52) A Supreme Court that manifested a will to lead our country away from its current path to woke tyranny--a will that we very much need right now--could recognize freedom of association as a fundamental right protected by the Fourteenth Amendment's longdormant Privileges or Immunities Clause, and it could use the Establishment Clause to cast doubt on the constitutionality of governing schools (AAP; text H).
53) Russia has pillaged and plundered resources to cripple Ukraine (AAP; text I) and to replenish its own coffers.
54) Russia has pillaged and plundered resources to cripple Ukraine and to replenish its own coffers (AAP; text I).
55) Egypt implemented a ban on the export of homegrown grain in March (notably, India is exempt from the ban) and Indonesia halted exports of palm oil for three weeks before imposing a Domestic Market Obligation to ensure that a minimum amount of cooking oil remains at home (AAP; text I).
56) These improvements should be targeted at women, according to the International Maize and Wheat Center, to have the most profound effect (AAP; text I).
57) Although the circumstances could not be more dire, the playing field may be a little more level now for a range of producers to spur new economic activity (AAP; text I).
58) Congress, meanwhile, created the Bureau of Refugees, Freedmen, and Abandoned Lands in early 1865 to help for one year in the "reconstruction" of the South (APP; text J).
59) To help manage the "transition (AAP; text J)," President Andrew Johnson brought in a team of military generals who served in the Union army.
60) Schools of all sorts, many organized by freed Blacks on abandoned property, emerged immediately after the war, with the Freedmen's Bureau playing a role in the establishment of some 3,000 free schools for Blacks and Whites to help them make the transition to freedom from the slavery era (AAP; text $\mathbf{J}$ ), according to federal records of the time.
61) In Nashville, which had been the base for a number of federally protected campuses for runaway slaves then called "contraband," General Clinton B. Fisk, recruited to be an assistant commissioner of the Freedmen's Bureau in charge of Kentucky and Tennessee (AAP; text J), worked with the American Missionary Association (AMA) to establish a school there.
62) In Nashville, which had been the base for a number of federally protected campuses for runaway slaves then called "contraband," General Clinton B. Fisk, recruited to be an assistant commissioner of the Freedmen's Bureau in charge of Kentucky and Tennessee, worked with the American Missionary Association (AMA) to establish a school there (AAP; text J).
63) Although it started with lower-grades education, it was only a few years before Fisk was graduating students with sufficient training to be sent to other emerging free schools to teach others (AAP; text J), according to federal and Fisk University historical documents.
64) From the start, its founders had a great vision for Fisk as a liberal arts school, convinced Blacks needed to be educated in the social sciences in order to lead (AAP; text J), despite the widespread opposition from more well-to-do White Southerners.
65) Its chief sponsor, Gen. Oliver O. Howard, then head of the Freedmen's Bureau, provided funds from the bureau's budget to acquire the land (AAP; text J) and erect the first building for the institution, which started as a seminary and quickly expanded its focus and mission.
66) Its chief sponsor, Gen. Oliver O. Howard, then head of the Freedmen's Bureau, provided funds from the bureau's budget to acquire the land and [to] erect the first building for the institution (AAP; text $\mathbf{J}$ ), which started as a seminary and quickly expanded its focus and mission.
67) From that school of thought came the leadership of Gen. Samuel Armstrong, another Union veteran recruited by Gen. Howard, to be superintendent of the Freedmen's Bureau of the Ninth District of Virginia (AAP; text J), according to Hampton archives.
68) Armstrong embraced the values of his predecessor, Major Gen. Benjamin Butler, who, in 1861, created small camps around now Union-controlled Fort Monroe near Hampton to house runaway slaves (AAP; text J).
69) Butler recruited teachers, including Mary Peake, a free Negro, to teach them (AAP; text J).
70) Further investigation revealed that HS-3 multiplied in a highly regulated manner, first creating short, pill-shaped cells (termed coccobacilli), which then elongated to form a single layer of tightly packed filamentous cells (AAR; text A).
71) In the presence of MAO inhibitors (MAOIs), DA or dihydroxyphenylalanine (DOPA) buildup leads to an increase in auto-oxidation to form quinones (AAR; text E), reactive neurotoxic compounds ${ }^{1}$ that are thought to contribute to the death of dopaminergic neurons.
72) It must be constitutionally cremated and buried, never again to be resurrected by Congress or government agencies (AAR; text H).

Adverbial conjuncts:

1) To summarize (AC; text B), the few investigated treatment protocols show similarities but emphasize different elements, with concrete behavioral elements possibly being most suitable for people with psychosis.
2) To take another example ( $\mathbf{A C}$; text $\mathbf{H}$ ), an expansive definition of "religion" for establishment clause purposes would imply that public schools cannot teach divisive secular religions such as wokeness.

Adverbial disjuncts:

1) To be sure (AD; text $\mathbf{H}$ ), a plaintiff can prevail only if the offensive conduct is severe and pervasive.
2) To be sure (AD; text $\mathbf{H}$ ), overt discrimination remains technically unlawful, which partly explains why employers shroud their practices in the latest rhetoric of inclusion recommended by a permanent staff of "diversity" professionals.

Nominal clauses:

1) It is easy to imagine how mutations affecting multicellular development could have been selected for under these conditions $\left(\mathbf{N C S}_{\mathbf{E}}\right.$; text $\left.\mathbf{A}\right)$, gradually paving the way for genetically-regulated developmental control.
2) Using the presence of specific traits to define this evolutionary transition often fails to be sufficiently general; instead, it may be more accurate to use evolutionary dynamics as an indicator ( $\mathrm{NCS}_{\mathrm{E}}$; text A).
3) It would be premature to interpret a small, negative global SCC from end-use energy consumption as good news ( $\mathbf{N C S}_{\mathbf{E}}$; text $\mathbf{C}$ ), given that income inequities largely explain this result.
4) As youth in corrections are generally undereducated, it is important to note that academic achievement significantly aids in reducing recidivism rates ( $\mathrm{NCS}_{\mathrm{E}}$; text G) (Drakeford, 2002; Karger \& Currie-Rubin, 2013).
5) It is useless, for now, to predict where the six-justice conservative majority on the Supreme Court may be heading ( $\mathrm{NCSE}_{\mathrm{E}}$; text H ).
6) So far, the regime has yet to go to those extremes, but it is hard to identify a principled reason why not ( $\mathrm{NCS}_{\mathrm{E}}$; text H ).
7) It takes but one event to catalyze the next lurch toward the obliteration of the old American order (NCSE; text H).
8) The result is that it is all but illegal to permit discussion of, say, the latest book by Charles Murray ( $\mathbf{N C S E}_{\mathbf{E}}$; text H), and all but mandatory to endorse, say, the Black Lives Matter movement.
9) The result is that it is all but illegal to permit discussion of, say, the latest book by Charles Murray, and [it is] all but mandatory to endorse, say, the Black Lives Matter movement (NCSE; text H).
10) Perhaps, after twenty-five years, it will no longer be necessary to continue the burden-shifting device ( $\mathbf{N C S}_{\mathrm{E}}$; text H ).
11) While it's difficult to know how much natural resources motivated Russia's incursion into Ukraine ( $\mathbf{N C S E}_{\mathbf{E}}$; text I), the eastern and southern parts of Ukraine are certainly resource rich.
12) To describe Americans as living under a "regime" (NCS; text H)--like Eastern Europeans living under communism during the Cold War-- is to court dismay and disbelief.
13) To defeat it (NCS; text $\mathbf{H}$ ) will require leadership and the exercise of political power.
14) For the next two days, the colonies continued to increase in size (NCO; text A) and to add layers of packed, almost coiled, filamentous cells.
15) For the next two days, the colonies continued to increase in size and to add layers of packed, almost coiled, filamentous cells (NCO; text A).
16) But HS-3 was not idle -- it was simply shifting into the reproductive phase of its life cycle. In the center of the colony, between stacks of tightly packed filamentous cells, HS-3 began to form large numbers of coccobacilli (NCO; text A).
17) Once groups are able to reproduce and possess heritable variation in traits that affect their fitness, they can start to acquire group-level adaptations (NCO; text A) that allow them to become more integrated and organismal (Rose and Hammerschmidt, 2021 (8)).
18) Steel et al. (2015) [13] and van der Gaag et al. (2012) [6] used positive or competitive memory training (COMET [14, 15];) which posits that there are functional selfcognitions available, but these need to become more prominent by imagery of positive memories (NCO; text B).
19) Additionally, patients are asked to complete online questionnaires regarding symptoms and quality of life ( NCO ; text B).
20) Schemas help to organize information (NCO; text B) and allow to take shortcuts in interpreting a vast amount of information.
21) Finally, patients receive information and training about receiving criticism and they discuss how to prevent relapse (NCO; text B).
22) While the present study results are promising, there are a number of limitations that need to be acknowledged (NCO; text B).
23) Projections of the effects of climate change on energy consumption therefore need to take into account geographical differences and income dynamics (NCO; text C).
24) The Jewishness of Kameny and Landers also points us to a research path--one undertaken in this special issue--that asks scholars to focus on the overlapping histories of sexuality and Jewishness in the United States (NCO; text D).
25) For thinkers seeking to understand how American Jews maintained their distinctiveness despite their relatively successful integration (NCO; text D), studying Jews' own sexual norms helps make sense of how they determined the boundaries of the Jewish community.
26) By comparing American Jewish responses to same-sex and interfaith marriage over the past fifty years, the authors explore how religious leaders sought to reconcile progressive social attitudes with a family-centered, survivalist ethos (NCO; text D).
27) Her 1975 novel, Consenting Adult, which sought to combat homophobia (NCO; text D), similarly belonged to the genre of social protest novel.
28) When endogenous MAOs were inhibited, cytosolic reactive oxygen species (ROS) began to increase (NCO; text E), presumably by auto-oxidation of the overabundant dopamine.
29) The assistance given by MAOB at the early stages of the phasic firing was lessened somewhat at later stages, however, owing to MAOB's lower affinity to DA compared to the dopamine vesicular uptake machinery, vesicular mononamine transporter 2 (VMAT2), which seemingly began to claim dopamine for the vesicles (NCO; text E) once cytosolic DA levels began to drop.
30) The assistance given by MAOB at the early stages of the phasic firing was lessened somewhat at later stages, however, owing to MAOB's lower affinity to DA compared to the dopamine vesicular uptake machinery, vesicular mononamine transporter 2 (VMAT2), which seemingly began to claim dopamine for the vesicles once cytosolic DA levels began to drop ( $\mathbf{N C O}$; text E).
31) The researchers observed that, in the Earth-system model they used for their study (CLIMBER-2), ice begins to form (NCO; text F) when insolation in the Northern Hemisphere at the summer solstice falls below a certain value that depends logarithmically on the concentration of atmospheric C[O.sub.2].
32) But for this absorption to occur, carbonate minerals in the ocean will need to be dissolved (NCO; text F), to counteract the increase in ocean acidity that occurs when C[O.sub.2] is absorbed, and which limits the amount of C[O.sub.2] that can be dissolved.
33) To provide better predictions, we need to pay special attention to climate processes (NCO; text F) that are currently not well quantified.
34) The PYD framework is a theoretical model that, rather than viewing youth as "broken" individuals who need to be fixed (NCO; text G), focuses on their assets and healthy development (OJJDP, 2014, 2016).
35) Hospital systems propose to withhold life-saving medicines based on race (NCO; text H ).
36) Instead, the evil that the principle demands to be corrected (NCO; text H) is any over-representation of the characteristics of any historically European population-heterosexual, white, and Christian.
37) The doctrine of equity is perhaps silently held in check only by the many powerful white people--such as the Bush, Biden, Clinton, and Sulzberger clans--who, even as they profess support for the equity regime, would lose their own power and privileges if the regime consistently sought to achieve its goals ( $\mathbf{N C O}$; text $\mathbf{H}$ ).
38) A prudent corporate executive seeks to avoid liability ( $\mathbf{N C O}$; text $\mathbf{H}$ ), and this means adopting a zero-tolerance policy that prohibits any speech or conduct that could offend.
39) In the pending cases in which Students for Fair Admissions is suing both Harvard and the University of North Carolina, asking the court to overturn Grutter (NCO; text $\mathbf{H}$ ), the Supreme Court must do more than reject "diversity" as a legitimate pretext for discriminating on the basis of race or other characteristics.
40) With a prima facie case established, the university can then seek to justify the deviation ( NCO ; text H ).
41) But do not let them continue to employ the coercive powers of the state (NCO; text H) to impose their vision on others.
42) Russia has also unilaterally cut off some energy exports to Poland, Bulgaria, and Finland, and has claimed to be curtailing grain exports to some markets (NCO; text I).
43) While several EU countries are taking steps to accelerate their transition to renewable energy in response, and the EU plans to reduce its Russian reliance (NCO; text I) and increase investment in renewables, its continued need for Russia for energy has helped finance the country's ongoing military incursion.
44) While several EU countries are taking steps to accelerate their transition to renewable energy in response, and the EU plans to reduce its Russian reliance and [to] increase investment in renewables (NCO; text I), its continued need for Russia for energy has helped finance the country's ongoing military incursion.
45) While some oil will be allowable by pipeline, countries like Germany and Poland plan to end all Russian oil imports by the end of the year ( NCO ; text I).
46) Other countries, such as Brazil and Nigeria--also heavily dependent on Russian fertilizer exports--continue to purchase fertilizer from Russia (NCO; text I) but are logistically hampered by the effects that sanctions are having on overall supply.
47) The issue facing those trying to "reunite" the nation (NCO; text J) was how to help some 4 million Blacks in the South transition from slavery to freedom.
48) Exploring the roots of historically Black colleges helps to better explain the challenges and achievements of the pioneers (NCO; text J) and put todays hurdles in context, say historians.
49) Exploring the roots of historically Black colleges helps to better explain the challenges and achievements of the pioneers and [to] put todays hurdles in context (NCO; text J), say historians.
50) They wanted to bring their moral values to the South (NCO; text J).
51) Working as a unit of the Department of War, the Freedmen's Bureau could set up education programs, allocate land the federal government had claimed as "abandoned" during the war and help to establish labor agreements ( $\mathbf{N C O}$; text J).
52) From the start, its founders had a great vision for Fisk as a liberal arts school, convinced Blacks needed to be educated in the social sciences (NCO; text J) in order to lead, despite the widespread opposition from more well-to-do White Southerners.
53) Therefore we aimed to investigate the efficacy of an accessible psychological group treatment [17] targeting self-esteem in patients with a psychotic disorder ( $\mathrm{NCO}^{*}$; text B).
54) The therapy aims to strengthen pathways to positive self-beliefs (NCO*; text B) and make them more easily accessible.
55) The therapy aims to strengthen pathways to positive self-beliefs and [to] make them more easily accessible ( $\mathrm{NCO}^{*}$; text B).
56) But the pressures on receiving communities are real and the toll is mounting as governments and international organizations struggle to provide food and critical services like medical care, housing, and education ( $\mathrm{NCO}^{*}$; text I).
57) The crucial move is to elaborate a burden-shifting framework that will make it impossible for universities to camouflage the practice of discrimination ( $\mathrm{NCO}_{\mathrm{E}}$; text H ).
58) This burden-shifting framework would have the effect of making it all but impossible for universities to discriminate in admissions on the basis of race or any other factor ( $\mathrm{NCO}_{\mathrm{E}}$; text H ).
59) The war in Ukraine is illustrating today how conflict can drive food insecurity by reducing the amount of food available, by making it difficult for those in active conflict zones and those fleeing conflict to get enough food ( $\mathbf{N C O}_{\mathrm{E}}$; text I).
60) The first step in this transition is for groups of cells to become distinct evolutionary units (NCC $\mathbf{N C}_{\mathbf{s}}$ text A) (Ratcliff et al., 2012 (7)).
61) To describe Americans as living under a "regime"--like Eastern Europeans living under communism during the Cold War-- is to court dismay and disbelief (NCCs; text H ).
62) The crucial move is to elaborate a burden-shifting framework (NCCs; text H) that will make it impossible for universities to camouflage the practice of discrimination.
63) The best solution to the situation is for Russia to withdraw its troops (NCCs; text I), and while there's always hope for such a peaceful resolution, that does not presently seem likely.
64) The most immediate need is to shore up stability by increasing humanitarian supplies of food, fertilizer, and energy (NCCs; text I).
65) One of the main ways to counter the resource fragility of the current situation is to diversify [global supplies of wheat, minerals, and energy] (NCCs; text I) and improve global supplies of wheat, minerals, and energy.
66) One of the main ways to counter the resource fragility of the current situation is to diversify and [to] improve global supplies of wheat, minerals, and energy (NCCs; text I).
67) The issue facing those trying to "reunite" the nation was how to help some 4 million Blacks in the South transition from slavery to freedom (NCCs; text J).
68) Armstrong, who focused on the trades and industrial skills, felt the quickest road to self-sufficiency for the free man was to learn a skill or trade (NCCs; text J) that could earn one money to support themselves, family and buy land.
69) Group therapy led by therapists with less specialized training may be suitable to fill the gap ( $\mathrm{NCC}_{\mathrm{A}}$; text B).
70) These disparate and diverse effects are difficult to quantify ( $\mathbf{N C C}_{\mathbf{A}}$; text C), particularly in economic terms.
71) According to Underwood and Washington (2016), the current system is ill equipped to manage juveniles with mental illness ( $\mathbf{N C C}_{\mathbf{a}} ; \boldsymbol{t e x t} \mathbf{G}$ ) and alternative solutions must be developed.
72) Illiteracy also poses greater implications for youth's educational needs, primarily their lack of skills necessary to cope with verbally mediated interventions aimed at reducing recidivism ( $\mathrm{NCC}_{\mathrm{A}}$; text G ).
73) Therefore, youth are better equipped to manage their delinquency ( $\mathbf{N C C A}_{\mathbf{A}}$; text $\mathbf{G}$ ), resulting in lower recidivism rates and potentially saving the U.S. economy millions of dollars.
74) Consistent with the Court's jurisprudence that protects fundamental rights from violation, any justification must be strictly necessary and narrowly tailored to achieve a superior educational outcome ( $\mathrm{NCC}_{\mathrm{A}}$; text H ).
75) Let Utopians remain free to pursue their dreams of equality ( $\mathbf{N C C}_{A}$; text $\mathbf{H}$ ), as Robert Owen and others did theirs in the nineteenth century.
76) No sooner had they arrived across the region than they were faced by countless crowds of "freedmen"--Black men, women, young and old--and poor Whites, hungry to get an education ( $\mathbf{N C C}_{\mathbf{A}}$; text $\mathbf{J}$ ), according to historical accounts of the time based on federal reports, reports of abolitionists and missionary groups.

Post-modifiers in noun phrases:

1) Mitochondrial ROS production was more significantly increased by methamphetamine or exogenous dopamine in the axons than in the soma, most likely because the axon is the first location to handle high DA content during stress (PMR; text E).
2) Given Russia's past behavior in Georgia, Estonia, the United Kingdom, Syria, and Ukraine itself, there is reason to believe Putin is prepared to carry out his threats (PMR; text I), creating a climate of instability and fear.
3) Beyond these direct effects on combatants, neighbors, and trade partners, Russia is the largest economy to be hit with such comprehensive sanctions since World War II (PMR; text I), and the first in such an interdependent global economy.
4) With energy, for example, there will likely be a need to diversify oil and natural gas supplies in the near term, but increased investment in alternative energy is ultimately the only way to blunt Russia's ability to weaponize energy (PMR; text I) while also slowing global climate change.
5) One of the main ways to counter the resource fragility of the current situation (PMR; text I) is to diversify and improve global supplies of wheat, minerals, and energy.
6) Combined, what emerged immediately after the war was a handful of "free colored schools" that served as the foundation for the education of Blacks, poor Whites and Native Americans for decades to come (PMR; text J), according to historical accounts and federal reports of the era.
7) A handful of these institutions became the first in the South to offer formal education to Black men and women (PMR; text J).
8) A challenging future was ahead indeed, with no clear road map to get there (PMR; text $\mathbf{J}$ ) and only scattered help along the way.
9) The treatment has the potential to be easily available (PMA; text B) because of the group setting, the required level of education of the therapists, and the clear and structured treatment program.
10) Programmes to expand access (PMA; text C) could be an important strategy for adaptation to climate change in these regions.
11) Hobson excoriated homophobia as an irrational hatred through analogizing it to Jewishness and antisemitism, while her ability to act as a sympathetic translator of gay life to straight audiences (PMA; text D) stemmed in part from her sense of herself as an outsider in the largely gentile social circles that she traveled in.
12) In the end, the articles in this issue offer an invitation and provocation to think about the difference Jewishness makes to the history of sexuality and the ways in which sexual matters shape Jewishness (PMA; text D).
13) In disease states, after a portion of dopaminergic neurons have died, the remaining neurons are more burdened by the increased requirement to produce dopamine from the remaining axonal arbors (PMA; text E) ${ }^{9,10}$, emphasizing that the balance between energy supply and oxidative damage may be more crucial once damage has occurred.
14) In addition, stressed neurons may lose the ability to regulate the levels of specific ETCs (PMA; text E), negatively affecting the ability of mitochondria to balance ATP versus ROS production ${ }^{6,11-13}$.
15) In addition, stressed neurons may lose the ability to regulate the levels of specific ETCs, negatively affecting the ability of mitochondria to balance ATP versus ROS production (PMA; text E) ${ }^{6,11-13}$.
16) It has been well established that juvenile offenders often struggle with both academic and mental health challenges, further contributing to the struggle to truly rehabilitate (PMA; text G) and break the cycle of recidivism.
17) It has been well established that juvenile offenders often struggle with both academic and mental health challenges, further contributing to the struggle to truly rehabilitate and [to] break the cycle of recidivism (PMA; text G).
18) Specifically, therapeutic writing programs have the potential to address both educational and emotional barriers in this population (PMA; text G).
19) When given the opportunity to learn in a structured environment with low student-to-teacher ratios (PMA; text G), youth in corrections can greatly improve reading and writing skills (Drakeford, 2002; Twomey, 2008).
20) Literacy programs also provide youth with opportunities to work on interpersonal communication skills for conflict resolution and smoother transitions back into society (PMA; text G) (Drakeford, 2002).
21) Clearly, educational programs with a strong emphasis on literacy development reduce crime and recidivism rates by providing opportunities for juvenile detainees to channel creativity, self-expression, and process emotions (PMA; text G) that often accompany mental health challenges (Drakeford, 2002).
22) Both creative and educational programs help promote stability during incarceration, but creative/therapeutic writing programs have the unique capacity to simultaneously address both literacy and mental health (PMA; text G).
23) By creating space for the basic human need for autonomy and self-expression, such programs provide valuable opportunities for youth, particularly for those in juvenile detention settings, to address mental health concerns (PMA; text G) and provide healthy outlets for creative expression.
24) The Court has an opportunity not only to halt the rise of wokeness (PMA; text H) but to dismantle its legal foundation.
25) The Court has an opportunity not only to halt the rise of wokeness but to dismantle its legal foundation (PMA; text H).
26) Inevitably, however, the failure of the regime to realize the principle of equity (PMA; text H) gets noticed.
27) Now it's the turn of women's sports to be the victim of the principle of equity (PMA; text H).
28) Meanwhile, one institution--the Supreme Court--has the power to defeat the regime altogether (PMA; text H).
29) To be effective, the Supreme Court's holding must limit the power of Congress, state and local governments, and administrative agencies to revive hostile environment claims (PMA; text H).
30) For businesses, the practical import of disparate impact is clear: Any failure to achieve proportionate outcomes among groups (PMA; text H) is an invitation to a lawsuit.
31) Before its elevation into a sacred value, "diversity" was one justice's makeshift attempt in 1978 to rationalize racial discrimination in university admissions (PMA; text H).
32) The ongoing failure to achieve proportionate outcomes among all groups (PMA; text $\mathbf{H}$ )--not just in universities, but in any domain of life--pointedly demonstrates the folly of trying or expecting it ever to happen.
33) A Supreme Court that manifested a will to lead our country away from its current path to woke tyranny (PMA; text $\mathbf{H}$ )--a will that we very much need right now-could recognize freedom of association as a fundamental right protected by the

Fourteenth Amendment's long-dormant Privileges or Immunities Clause, and it could use the Establishment Clause to cast doubt on the constitutionality of governing schools.
34) Rather, the doctrine of equity grinds on toward complete dominance because it has been awarded tremendous legal power to destroy dissenters (PMA; text H).
35) While these measures generally exempt natural resources, broad restrictions on Russia's ability to access international banking and financing (PMA; text I) are affecting trade writ large, including in key areas such as fertilizers.
36) Ukrainian refugees have been notably welcomed, and the EU has granted Ukrainians the right to stay and work in its 27 member nations for up to three years (PMA; text I).
37) Ukrainian refugees have been notably welcomed, and the EU has granted Ukrainians the right to stay and [to] work in its 27 member nations for up to three years (PMA; text I).
38) On May 30, the EU's 27 member countries reached an agreement to phase out reliance on Russian oil (PMA; text I).
39) If supplies from Russia and Belarus--or even just Russia--are disrupted, there is far more competition for Canadian potash, and there is pressure to increase production elsewhere (PMA; text I).
40) The crisis response presents an opportunity to incorporate other key drivers straining the system (PMA; text I), and build long-term resilience and adaptation measures into emergency relief.
41) The crisis response presents an opportunity to incorporate other key drivers straining the system, and [to] build long-term resilience and adaptation measures into emergency relief (PMA; text I).
42) With energy, for example, there will likely be a need to diversify oil and natural gas supplies in the near term (PMA; text I), but increased investment in alternative energy is ultimately the only way to blunt Russia's ability to weaponize energy while also slowing global climate change.
43) With energy, for example, there will likely be a need to diversify oil and natural gas supplies in the near term, but increased investment in alternative energy is ultimately the only way to blunt Russia's ability to weaponize energy (PMA; text I) while also slowing global climate change.
44) At the same time, historians write, the reconstructionists were met at nearly every turn with widespread opposition across the South to almost every effort to make Blacks "equal" partners in the reunited Union (PMA; text J).
45) Gen. Howard also was architect of the plan to build Freedmen's Hospital on the Howard grounds (PMA; text J).
46) "The purposes of the Corporation are the education of young men and women irrespective of color and to that end the Trustees shall have the right to prescribe a course of study (PMA; text J) and shall have the power to confer all such degrees and honors as are conferred by universities in the United States," the Fisk trustees declared.
47) "The purposes of the Corporation are the education of young men and women irrespective of color and to that end the Trustees shall have the right to prescribe a course of study and shall have the power to confer all such degrees and honors (PMA; text J) as are conferred by universities in the United States," the Fisk trustees declared.
48) A strong declaration to serve (PMA; text J) it was, one that challenged followers there and across the region to at least match, if not exceed.

Comparative clauses:

1) We should not be too quick to accept this premise (CC; text A).
2) Mehta and Krutsch thus show how marriage remained a key institution within Judaism--one that was simultaneously dynamic enough to incorporate same-sex sexuality (CC; text D) and imagined as precarious in the face of religious heterogeneity.
3) But at what point does this impact become sufficiently large to affect climate and glacial inception (CC; text $\mathbf{F}$ )?
4) A modelling study (3) in 2000 established that pre-industrial levels of C[O.sub.2] were high enough to guarantee a period of interglacial conditions for at least $\mathbf{5 0 , 0 0 0}$ years (CC; text F) (Fig. 1).
5) The authors were thus able to confirm that Earth had a narrow escape from glacial inception during the Holocene: the increase in atmospheric C[O.sub.2] levels during this period was sufficient to prevent the planet from entering a glacial period (CC; text F).
6) Consequently, anthropogenic $\mathrm{C}[\mathrm{O}$. sub.2] will still be in the atmosphere in 50,000 years' time, and even 100,000 years, which is enough to prevent any glaciation (CC; text F).
7) Food insecurity--not having enough food to live an active, healthy life (CC; text I)-can exacerbate conflict by increasing tensions among groups that are competing to control the resources needed for food production.
8) Although it started with lower-grades education, it was only a few years before Fisk was graduating students with sufficient training to be sent to other emerging free schools (CC; text J) to teach others, according to federal and Fisk University historical documents.

Other:

1) Over time, countless other prokaryotes have evolved transient multicellular phases in their life histories, allowing them to gain some of the benefits of multicellularity (CTC; text A) without fully committing to this strategy (Shapiro, 1998 (9)).
2) The work of Mizuno et al. helps us to understand how multicellularity can evolve (CTC; text A).
3) Once groups are able to reproduce and possess heritable variation in traits that affect their fitness, they can start to acquire group-level adaptations that allow them to become more integrated and organismal (CTC; text A) (Rose and Hammerschmidt, 2021 (8)).
4) The ecological scaffolding hypothesis argues that multicellular life cycles, which allow groups to become evolutionary units (CTC; text A), could have first been created by the environment rather than being encoded developmentally within the life cycle of a species (Black et al., 2020 (1)).
5) The intervention is designed to provide concrete and simple exercises for patients to integrate into their daily lives (CTC; text B).
6) US federal agencies, for instance, are required to perform a cost-benefit analysis of all their regulations (CTC; text C).
7) For climate and energy policies, this requires them to put a price on carbon dioxide emissions (CTC; text C).
8) Landers had published a column encouraging a gay man to seek counseling (CTC; text D) in order to "accept himself."
9) And she would regularly receive mixed feedback from Kameny who would push her to embrace ideas associated with the gay rights movement (CTC; text D).
10) Moving chronologically from the early to the middle of the twentieth century, Zev Eleff's article, "Piety and the Pill: American Orthodox Judaism and the Contraception Debate in the Postwar Era," allows us to understand American Orthodox Jews within broader histories of religious authority, reproductive autonomy, and sexual privacy (CTC; text D).
11) Doing so, we hope, will allow us to write exciting new histories about Jewish and sexual politics, communities, and identities in the United States (CTC; text D).
12) In the presence of MAO inhibitors (MAOIs), DA or dihydroxyphenylalanine (DOPA) buildup leads to an increase in auto-oxidation to form quinones, reactive neurotoxic compounds ${ }^{1}$ that are thought to contribute to the death of dopaminergic neurons (CTC; text E).
13) Multiple stimuli caused DA release to drop in the presence of the MAOB inhibitor or after application of oligomycin (CTC; text E), presumably because of the shortage of mitochondrial ATP.
14) They are known to readily rely on a single-subunit enzyme (CTC; text E) to oxidize NADH.
15) This whole substitute enzyme system completely bypasses mitochondrial innermembrane electron transport and causes ROS production to decrease dramatically (CTC; text E).
16) The answer is that the neuron is prepared to use excess dopamine metabolism for energy (CTC; text E), which provides an overall benefit to axonal health.
17) An equation has been derived that allows the timing of the onset of glaciations to be predicted (CTC; text F).
18) Creative arts-based programs that involve drawing, painting, sculpting, singing, dancing, and playing instruments have been shown to positively address mental health challenges (CTC; text G) (Hughes, 2005; Office of Juvenile Justice and Delinquency Prevention [OJJDP], 2016).
19) Therapeutic writing, also known as expressive writing, encourages youth to write about stressful or traumatic experiences and their associated emotions (CTC;
text $\mathbf{G}$ ) in order to help them process their feelings and gain more control over their mood responses and self-reflection.
20) According to Puzzanchera and Ehrmann (2019) of the OJJDP, suicide rates more than doubled over the past decade across all racial and ethnic groups within facility walls, causing youth suicide victims to exceed the annual number of youth homicide victims (CTC; text G).
21) Additionally, creative writing workshops enable incarcerated youth to broaden their social interactions and exposure to a wide array of written works (CTC; text G).
22) These programs in juvenile justice populations also serve as an outlet for negative behavioral urges by encouraging youth to reflect on the traumatic experiences that cause these urges (CTC; text G).
23) A conventionally conservative Supreme Court would be expected to hold that hostile work environment law violates the free speech clause (CTC; text H ).
24) First conjured by the Supreme Court in the 1971 case of Griggs v. Duke Power Company, disparate impact law allows a plaintiff in an employment discrimination case to prevail without evidence of discriminatory intent (CTC; text H), simply by showing that a job requirement or hiring procedure has a disparate impact on the plaintiff's protected class.
25) In theory, a disparate impact claim does not automatically prevail, for the law allows businesses to defend a practice by proving "business necessity (CTC; text H)."
26) As Justice Scalia wrote in a 2009 concurrence, the day is coming when the Supreme Court must decide whether the government, through disparate impact law, can effectively compel employers to discriminate on the basis of race or other ascriptive characteristics (CTC; text H ).
27) But O'Connor added that race-conscious admissions "must be limited in time," and announced that the majority expected racial preferences to be unnecessary after twenty-five more years (CTC; text H).
28) The ongoing failure to achieve proportionate outcomes among all groups--not just in universities, but in any domain of life--pointedly demonstrates the folly of trying or expecting it ever to happen (CTC; text H).
29) By requiring universities to justify in court any deviations from measurable inequalities (CTC; text H), the Supreme Court can not only end governmentprotected racial discrimination but permanently discredit the doctrine of equity.
30) As of April 2022, damage to infrastructure was estimated to cost in the range of $\$ 68$ to 199 billion (CTC; text I).
31) The Ukrainian economy is expected to shrink by 40 percent this year (CTC; text I) and Russia's agriculture minister has warned that half the country's harvest could be lost.
32) Investments in Ukraine's mining sector before the conflict were expected to be roughly $\mathbf{\$ 1 0}$ billion across $\mathbf{2 4}$ projects (CTC; text I).
33) Given Russia's past behavior in Georgia, Estonia, the United Kingdom, Syria, and Ukraine itself, there is reason to believe Putin is prepared to carry out his threats (CTC; text I), creating a climate of instability and fear.
34) Using the presence of specific traits to define this evolutionary transition often fails to be sufficiently general (CAT; text A); instead, it may be more accurate to use evolutionary dynamics as an indicator.
35) Key traits of HS-3, including coordinated colony growth, differentiation, and dispersal upon submersion, all appear to be multicellular adaptations to a reliably fluctuating environment (CAT; text A) -- though Mizuno et al. did not formally test adaptive hypotheses.
36) This might be warranted for some forms of psychological treatment, but seems to be unnecessary for treatments addressing one specific symptom or characteristic, such as low self-esteem (CAT; text B).
37) The current study indicates that such a structured program including concrete behavioral elements and practical exercises that are easily integrated into patients' daily lives seems to be suitable for patients with psychosis (CAT; text B).
38) By contrast, however, they found that endogenous MAO activity did not activate the Cyto-GFP sensor unless they overexpressed a MAO mutant that failed to target to mitochondria (CAT; text E), possibly explaining the mystery of why MAOs are linked to the mitochondrial outer membrane.
39) But that formulation turns out to be inadequate (CAT; text H).
40) Many say that the rising generation demands measures to ensure diversity, equity, and inclusion, and that institutions and companies that hope to recruit the best and brightest (CAT; text $\mathbf{H}$ ) must comply with the equity regime.
41) The umbrella of opposition was in waves of state laws that came to be quickly known as the "Black Codes (CAT; text J)."
42) I leave aside the stimulating debates over whether to abandon [originalism] (PC; text H ) or modify originalism.
43) I leave aside the stimulating debates over whether to abandon or [whether to] modify originalism ( $\mathbf{P C}$; text $\mathbf{H}$ ).
44) There was another principal school of thought on how best to help the freed Blacks carve a niche in the new society ( $\mathbf{P C}$; text J )--by focusing on the trades.

Indeterminate:

1) The graduate psychologists were in training to become a post-graduate psychologist (IND - PMA vs. AAP; text B).
2) They then applied one of two different treatments to increase the cytosolic DA levels (IND - PMA vs. AAP; text E): (1) disrupting vesicular stores with the monoamine transporter inhibitor methamphetamine; or (2) increasing DA availability by exogenous application of levodopa.
3) To address this limitation, administrators can take certain steps to increase willingness in nonparticipants through "advertising" or word of mouth among the residents in the facilities (IND - PMA vs. AAP; text G).
4) Many say that the rising generation demands measures to ensure diversity, equity, and inclusion (IND - PMA vs. AAP; text $\mathbf{H}$ ), and that institutions and companies that hope to recruit the best and brightest must comply with the equity regime.
5) While several EU countries are taking steps to accelerate their transition to renewable energy in response (IND - PMA vs. AAP; text I), and the EU plans to reduce its Russian reliance and increase investment in renewables, its continued need for Russia for energy has helped finance the country's ongoing military incursion.
6) The global community should plan for a protracted conflict and take urgent measures to mitigate the three rings of impact (IND - PMA vs. AAP; text I).
7) This finding alone highlights the importance of updating the currently used models to estimate the SCC (IND - PMR vs. AAP; text C).
8) Surely the Court knows that striking down affirmative action as unconstitutional will provoke resistance on a scale to dwarf the "massive resistance" attempted in the wake of Brown v. Board of Education (IND - PMR vs. AAP; text H) (1954).
9) The missionaries, led by the American Missionary Association and other religious groups, could recruit the people and raise the money to pursue the goal (IND - PMR vs. AAP; text J).
10) Armstrong, who focused on the trades and industrial skills, felt the quickest road to self-sufficiency for the free man was to learn a skill or trade that could earn one money to support themselves, family (IND - PMR vs. AAP; text J) and buy land.
11) Armstrong, who focused on the trades and industrial skills, felt the quickest road to self-sufficiency for the free man was to learn a skill or trade that could earn one money to support themselves, family and [to] buy land (IND - PMR vs. AAP; text J).
12) In its original 1866 papers of incorporation, the Fisk trustees set the tone for the movement to educate the freed Black men and women of the South (IND - PM* vs. AAP; text J):
13) Schemas help to organize information and allow to take shortcuts in interpreting a vast amount of information (IND - CTC vs. NCO; text B).
14) Public school teachers urge children to sterilize themselves (IND - CTC vs. NCO; text $\mathbf{H})$ and mutilate their sex organs.
15) Public school teachers urge children to sterilize themselves and [to] mutilate their sex organs (IND - CTC vs. NCO; text H).
16) Russia and Ukraine's neighbors are experiencing other pressures as Putin and his proxies have threatened to retaliate against most of Russia's neighbors for their support of Ukraine, including Lithuania, Poland, Moldova, Bulgaria, Romania, Finland, Sweden, Estonia, and Japan, including with nuclear war (IND - CTC vs. NCO; text I).
17) Most recently, President Putin vowed to deploy a new nuclear-capable missile he said could reach the United Kingdom in 3 minutes (IND - CTC vs. NCO; text I).
18) A strong declaration to serve it was, one that challenged followers there and across the region to at least match (IND - CTC vs. NCO; text J), if not exceed.
19) A strong declaration to serve it was, one that challenged followers there and across the region to at least match, if not [to] exceed (IND - CTC vs. NCO; text J).
20) In contrast to yeast, in dopaminergic neurons that have activated the proposed alternative energy pathway, complex IV is still available to polarize the mitochondrial membrane (IND - NCC $\mathrm{N}_{\mathrm{A}}$ vs. AAP; text E).
21) I wish only to show that a conventional right-wing jurisprudence--whether described as "originalist" or not--on a select number of questions is a mortal threat to the regime (IND - CAT vs. NCO; text H).
22) Education to Reduce Recidivism (IND; text G)
23) Therapeutic Writing to Address Literacy, Mental Health, and Recidivism (IND; text G)
24) Further, to bolster their bona fides should they be sued, employers make sure to adopt the latest ideological fashions (IND; text H).
25) Food insecurity--not having enough food to live an active, healthy life-- can exacerbate conflict by increasing tensions among groups that are competing to control the resources needed for food production (IND; text I).
26) Meanwhile, South Sudan is set to experience its worst hunger emergency in history (IND; text I) as food supplies dry up in the lean period.

## Appendix B - Newspaper corpus

## List of source material:

Text A: Trump Files Lawsuit to Avoid Jan. 6 Subpoena [The Huffington Post] (https://www.huffpost.com/entry/trump-files-lawsuit-to-avoid-jan-6-committeesubpoena_n_636ef7ede4b0290136423265)

Text B: Haas's Kevin Magnussen takes sprint pole in Brazilian F1 GP shock [The Guardian] (https://www.theguardian.com/sport/2022/nov/11/unconfined-joy-for-magnussen-as-he-delivers-first-ever-pole-position-for-haas)

Text C: Bucs legend Mike Alstott talk 'honor' working with US troops in Germany before historic NFL game [New York Post] (https://nypost.com/2022/11/12/bucs-legend-mike-alstott-talks-honor-working-with-us-troops-in-germany-before-historic-nfl-game/)

Text D: Kate Winslet covers mum’s $£ 17,000$ energy bill [BBC News]
(https://www.bbc.com/news/uk-scotland-tayside-central-63599369)
Text E: Mum axed in the head by ex after he saw her kissing Towie's Kirk Norcross FaceTimed the star to tell him 'I am dying' [The Sun]
(https://www.thesun.co.uk/news/20489011/mum-axed-head-ex-kissing-towie-kirk-norcross/)
Text F: COP27 summit agrees to help climate victims. But it does nothing to stop fossil fuels [CNN] (https://edition.cnn.com/2022/11/19/world/cop27-egypt-agreement-climateintl/index.html)

Text G: New blood test developed to detect signs of Alzheimer's disease [The Independent] (https://www.independent.co.uk/news/science/alzheimer-s-disease-new-blood-testb2252257.html)

Text H: US Supreme Court keeps asylum limits in place for now [AP News] (https://apnews.com/article/title-42-immigration-limits-supreme-court-updates0494c30834fad66ce9c6057ea1605d89)

Text I: Sandhurst urged to tackle 'toxic culture' of sexual assault [The Telegraph]
(https://www.telegraph.co.uk/news/2022/12/27/sandhurst-urged-tackle-toxic-culture-177-women-claim-sexual/)

Text J: Liverpool suffer injury concern as Cody Gakpo spotted at Anfield in Leicester win [Daily Express] (https://www.express.co.uk/sport/football/1715411/Liverpool-score-Wout-Faes-Cody-Gakpo-Leicester-Premier-League-latest)

Adverbial adjuncts:

1) Trump files lawsuit to avoid Jan. 6 subpoena (AAP; text A).
2) Dropped by Haas at the end of 2020, Magnussen was recalled by the team at the start of this season, to replace Russian driver Nikita Mazepin after the invasion of Ukraine (AAP; text B).
3) His team suggested he pit to wait it out (AAP; text B), but he instead set out to lay down a time anyway.
4) His team suggested he pit to wait it out, but he instead set out to lay down a time anyway (AAP; text B).
5) The Bucs and Seahawks will be in Munich on Sunday, where Alstott, Alexander and many other will be on hand to witness history (AAP; text C).
6) Alstott said he recently had a conversation about being one of the first teams to ever go overseas to play in London (AAP; text C) and remembering how cool of an experience that was.
7) Alstott will, of course, be pulling for his Bucs to beat Alexander's Seahawks, and he said Tom Brady's 55th game-winning drive of his career last week against the Los Angeles Rams is the spark needed to put them on a run moving forward (AAP; text C).
8) USAA's Salute to Service Boot Camp represents the evolution of authentic military appreciation events that USAA and the NFL have created to foster an understanding and appreciation for the local military community (AAP; text C), bringing the military closer to a game they love.
9) Winslet donated $£ 17,000$ to the family’s GoFundMe page and contacted Ms Hunter to wish them well (AAP; text D).
10) At present it costs them $£ 6,500$ a year to run the kit and heat the home - though Ms Hunter said she had turned heating off in most rooms to save money (AAP; text D).
11) Staff monitor Freya's heart rate as well as oxygen levels and carry out frequent suctioning to keep her airways always clear (AAP; text D).
12) In recent months Freya's room was the only one to be heated in order to keep her and her staff comfortable (AAP; text D) - but Ms Hunter said they have had to cut back.
13) "The council have put solar panels up to help with blackouts (AAP; text D) but don't think it'll help with the bill."
14) Ms Hunter said she would like to see Scottish and UK governments stepping in to support families with care responsibilities (AAP; text D) who may end up struggling.
15) She added: "I didn't speak out to get donations (AAP; text $\mathbf{D}$ ) but at the same time I have to make sure that Freya is OK."
16) Mum axed in head by ex after he saw her kissing Towie's Kirk Norcross FaceTimed the star to tell him 'I am dying (AAP; text E).'
17) Blood-soaked former model Alex Alam then FaceTimed the star on her iPad to tell him (AAP; text E): "I am dying - he has killed me, he has done me."
18) When she went outside to see her dogs (AAP; text E), he smashed her repeatedly over the head with an axe.
19) He said he "gave her a goodnight kiss" as he left at around midnight and texted her a few minutes later to say he was home (AAP; text E).
20) But it does nothing to stop fossil fuels (AAP; text F).
21) Negotiators and non-governmental organizations observing the talks praised the deal as a significant achievement, after developing nations and small island countries banded together to amplify pressure (AAP; text F).
22) The fund will focus on what can be done to support loss and damage resources (AAP; text F), but it does not include liability or compensation provisions, a senior Biden administration official told CNN.
23) "They needed to be together to force the conversation we're having now (AAP; text F)," Nisha Krishnan, resilience director for World Resources Institute Africa told reporters.
24) "The coalition has held because of this conviction that we did need to stay together to deliver this (AAP; text F) - and to push the conversation."
25) But while summit delegates affirmed the goal of keeping global warming to 1.5 degrees Celsius, climate experts expressed dismay about a lack of mention of fossil fuels, or the need to phase them down to keep global temperatures from rising (AAP; text F).
26) As it did last year at the Glasgow summit, the text calls for a phasedown of unabated coal power, and "phase-out of inefficient fossil fuel subsidies," but does not go further to call for a phase-out of all fossil fuels, including oil and gas (AAP; text F).
27) New blood test developed to detect signs of Alzheimer's disease (AAP; text G)
28) To diagnose the condition in patients (AAP; text G), clinicians follow guidelines that require the detection of three distinct components of the condition's pathology - the presence of amyloid plaques, tau tangles, and neurodegeneration in the brain.
29) To achieve this (AAP; text G), they designed a special antibody that selectively binds to BD-tau, making it easily detectable in the blood.
30) Immigration advocates sued to end the policy, saying it goes against American and international obligations to people fleeing to the U.S. to escape persecution (AAP; text H).
31) The Supreme Court's 5-4 decision comes as thousands of migrants have gathered on the Mexican side of the border, filling shelters and worrying advocates who are scrambling to figure out (AAP; text H) how to care for them.
32) "We are deeply disappointed for all the desperate asylum seekers who will continue to suffer because of Title 42, but we will continue fighting to eventually end the policy (AAP; text H)," said Lee Gelernt, a lawyer with the American Civil Liberties Union, which had been arguing to end Title 42's use.
33) "I'm grateful that Title 42 remains in place to help deter illegal entry at the US southern border (AAP; text H)."
34) The use of Title 42 to quickly expel migrants (AAP; text H) depends largely on Mexico's willingness to accept people from certain countries who are expelled from the United States.
35) In response to the findings, General Sir Patrick Sanders, the Chief of the General Staff, pledged he would ensure that the military fosters "the culture needed to ensure that the British Army remains a great institution (AAP; text I)".
36) "The new independent Serious Crime Unit, set up to investigate serious crimes across our tri-services (AAP; text I), independent of the chain of command, will ensure that anyone found guilty will face the full weight of the law and immediate dismissal."
37) The committee voted to subpoena Trump (AAR; text A) during its final televised hearing before the midterm elections and formally did so last month, demanding testimony from the former president.
38) It was filed in the Southern district of Florida, where other Trump lawyers successfully sued to secure a special master (AAR; text A) who has been tasked with conducting an independent review of records seized by the FBI during an Aug. 8 search of Mar-aLago.
39) Fortune favoured the brave as from the gloom and dam of Interlagos, Kevin Magnussen burst through to take a remarkable sprint pole position for the São Paulo Grand Prix (AAR; text B), the first of his career and the first for his Haas team.
40) Magnussen had already done superbly to put his Haas into Q3 (AAR; text B) and then grabbed his chance.
41) He denied attempted murder but a jury took less than four hours to convict him after a week-long trial (AAR; text E).
42) The Supreme Court is keeping pandemic-era limits on asylum in place for now, dashing hopes of migrants who have been fleeing violence and inequality in Latin America and elsewhere to reach the United States (AAR; text H).
43) Immigration advocates sued to end the policy (AAR; text H), saying it goes against American and international obligations to people fleeing to the U.S. to escape persecution.
44) Liverpool profited from a disastrous Wout Faes performance as they came from behind to beat Leicester City 2-1 at Anfield on Friday night (AAR; text J).
45) Faes netted past Danny Ward twice in the space of seven minutes to turn the game on its head (AAR; text J) and send Liverpool into the break ahead, which didn't change in a comfortable second half.
46) Faes netted past Danny Ward twice in the space of seven minutes to turn the game on its head and [to] send Liverpool into the break ahead (AAR; text J), which didn't change in a comfortable second half.
47) But he had a horror night to forget at Anfield, putting the ball in the wrong net twice to condemn the Foxes to back-to-back defeats (AAR; text J).

Adverbial conjuncts:
Adverbial disjuncts:
Nominal clauses:

1) "It's an honor to be out here with these guys (NCSE text $^{\mathbf{C}}$ ) and be a part of this."
2) "It's an honor to be out here with these guys and [to] be a part of this (NCS $\mathbf{N C}_{\mathbf{E}}$ text C)."
3) " $[I t$ 's an honor to] spent some time with the military today (NCSE; text C) and show our appreciation for what they do for us."
4) "[It's an honor to] spent some time with the military today and [to] show our appreciation for what they do for us ( $\mathrm{NCS}_{\mathrm{E}}$; text C)."
5) "It's even an honor to be out here coaching them up a little bit (NCSE; text C)."
6) At present it costs them $£ 6,500$ a year to run the kit ( $\mathbf{N C S}_{\mathbf{E}}$; text $\mathbf{D}$ ) and heat the home - though Ms Hunter said she had turned heating off in most rooms to save money.
7) At present it costs them $£ 6,500$ a year to run the kit and [to] heat the home ( $\mathbf{N C S}_{\mathbf{E}}$; text D) - though Ms Hunter said she had turned heating off in most rooms to save money.
8) "It is more than frustrating to see overdue steps on mitigation and the phase-out of fossil energies being stonewalled by a number of large emitters and oil producers (NCSE; text F)," German Foreign Minister Annalena Baerbock said in a statement.
9) He added: "We have always said that it is imperative for the developed world to help the developing world to deal with the impacts of climate ( $\mathrm{NCS}_{\mathrm{E}}$; text F )."
10) It took some dramatic action to even hold onto the $\mathbf{1 . 5}$-degree number struck in Glasgow last year ( $\mathbf{N C S}_{\mathrm{E}}$; text F ).
11) "I don't know what to say (NCO; text B), the team put me out on track at the right moment."
12) "I am nipping at the staff not to put the heating on unless it's necessary (NCO; text D)."
13) Ms Hunter said she would like to see Scottish and UK governments stepping in (NCO; text D) to support families with care responsibilities who may end up struggling.
14) "I wanted the government to pay for it (NCO; text D) and do the right thing - it shouldn't have to be a celebrity that steps in."
15) "I wanted the government to pay for it and [the government to] do the right thing (NCO; text D) - it shouldn't have to be a celebrity that steps in."
16) The former boss of the Dreamboys strippers tried to kill his ex with an axe (NCO; text E) after he saw her kissing Towie's Kirk Norcross.
17) Ms Alam screamed as Richards tried to strangle her (NCO; text E).
18) She said Richards bound her with cable ties and began dragging her around by the hair, accusing her of trying to ruin his life by going to police (NCO; text E).
19) He added: "In my submission, this is a man who intended to kill (NCO; text E)."
20) He claimed he planned to disable Ms Alam's horse box (NCO; text E), but denied being "embittered".
21) He denied trying to kill her (NCO; text $\mathbf{E}$ ) or even ever having an axe.
22) Negotiators from nearly 200 countries at the COP27 UN climate summit in Egypt took the historic step of agreeing to set up a "loss and damage" fund meant to help vulnerable countries cope with climate disasters and agreed the globe needs to cut greenhouse gas emissions nearly in half by 2030 (NCO; text F).
23) On Friday, 10-year-old Ghanian activist Nakeeyat Dramani received a standing ovation in the plenary after calling on the delegates to "have a heart (NCO; text F) and do the math."
24) On Friday, 10-year-old Ghanian activist Nakeeyat Dramani received a standing ovation in the plenary after calling on the delegates to "have a heart and [to] do the math (NCO; text F)."
25) The summit was originally scheduled to end on Friday, but went well into overtime with negotiators still trying to hammer out the details (NCO; text $\mathbf{F}$ ) as the conference venue was being dismantled around them.
26) The US and other developed nations have long sought to avoid such provisions that could open them up to legal liability and lawsuits from other countries (NCO; text F).
27) "They needed to be together (NCO; text F) to force the conversation we're having now," Nisha Krishnan, resilience director for World Resources Institute Africa told reporters.
28) "The coalition has held because of this conviction that we did need to stay together (NCO; text F) to deliver this - and to push the conversation."
29) "We do not want 1.5 Celsius to die here and today (NCO; text F)."
30) He continued to communicate with his team and his foreign counterparts by phone (NCO; text F), but his physical absence was noticeable during the crunch time at the summit.
31) The two sides met throughout the second week of COP, trying to pick up where they left off (NCO; text F) before China suspended the talks, according to a source familiar with the discussions.
32) "The challenge is they should do more than talk, [and] also need to lead (NCO; text F)," Shuo said, adding the restarted formal dialogue "helps to prevent the worst outcome."
33) "The challenge is they should do more than talk, [and] also need to lead," Shuo said, adding the restarted formal dialogue "helps to prevent the worst outcome (NCO; text F)."
34) In the new research, published on Tuesday in the journal Brain, scientists sought to develop a diagnostic tool using biomarkers in blood samples (NCO; text G) - which can be collected with minimally invasive methods compared to CSF.
35) Citing an example, they say blood levels of neurofilament light - a protein marker of nerve cell damage - become elevated not only in Alzheimer's disease, but also Parkinson's and other dementias, causing its detection to be less useful when trying to differentiate Alzheimer's from other neurodegenerative conditions (NCO; text G).
36) In further studies, scientists plan to conduct large-scale clinical validation of blood BD-tau in a wide range of research groups ( NCO ; text G), including those that recruit participants from diverse racial and ethnic backgrounds.
37) The Supreme Court's 5-4 decision comes as thousands of migrants have gathered on the Mexican side of the border, filling shelters and worrying advocates who are scrambling to figure out how to care for them ( NCO ; text H ).
38) "We are deeply disappointed for all the desperate asylum seekers who will continue to suffer because of Title 42 (NCO; text $\mathbf{H}$ ), but we will continue fighting to eventually end the policy," said Lee Gelernt, a lawyer with the American Civil Liberties Union, which had been arguing to end Title 42 's use.
39) Until the judge's November order in the advocates' lawsuit, the states had not sought to take part in that case ( NCO ; text H ).
40) The federal government asked the Supreme Court to reject the states' effort (NCO; text $\mathbf{H}$ ) while also acknowledging that ending the restrictions abruptly would likely lead to "disruption and a temporary increase in unlawful border crossings."
41) The administration has appealed the ruling, though it has not tried to keep Title 42 in place ( $\mathbf{N C O}$; text $\mathbf{H}$ ) while the legal case plays out.
42) Salute Her UK, a charity for female military personnel who have experienced sexual assault and rape, called on Army chiefs and the Ministry of Defence (MoD) to confront predatory behaviour at Sandhurst (NCO; text I) and claimed there was an "epidemic" of rape culture across the military.
43) Of those victims, 177 claim to have been raped or sexually assaulted whilst serving at Sandhurst (NCO; text I).
44) On another occasion, her superior tried to force his way into her room (NCO; text I), screaming at her to "open the door" as she lay shaking in bed.
45) On another occasion, her superior tried to force his way into her room, screaming at her to "open the door" (NCO; text I) as she lay shaking in bed.
46) "The Army is trying to change things (NCO; text I), but it's not doing enough."
47) "The cadets want to please (NCO; text I) and do well and are manipulated."
48) "The cadets want to please and [to] do well (NCO; text I) and are manipulated."
49) The Telegraph has previously revealed how Armed Forces personnel who have been sexually assaulted refused to report their attackers (NCO; text I) because defendants were twice as likely to be cleared in military courts than criminal courts.
50) "Young recruits deserve to be treated with respect (NCO; text I), not taken advantage of."
51) "Young recruits deserve to be treated with respect, not [to be] taken advantage of (NCO; text I)."
52) Tsimikas has proven to be a worthy stand-in option for Klopp (NCO; text J), but Robertson has etched his name into Anfield folklore with his role in the German boss' successful era.
53) The suit contends that, while former presidents have voluntarily agreed to provide testimony or documents in response to congressional subpoenas in the past ( $\mathrm{NCO}^{*}$; text A), "no president or former president has ever been compelled to do so.
54) He will start at the front for Saturday's 24 -lap dash, and will surely struggle to hold off the second-placed Max Verstappen ( $\mathrm{NCO}^{*}$; text B).
55) COP27 summit agrees to help climate victims ( $\mathrm{NCO}^{*}$; text $\mathbf{F}$ ).
56) It marks the first time countries and groups, including longtime holdouts like the United States and the EU, have agreed to establish a fund for nations vulnerable to climate disasters ( $\mathbf{N C O}^{*}$; text $\mathbf{F}$ ) made worse by pollution disproportionately produced by wealthy, industrialized nations.
57) Negotiators from nearly 200 countries at the COP27 UN climate summit in Egypt took the historic step of agreeing to set up a "loss and damage" fund ( $\mathrm{NCO}^{*}$; text F ) meant to help vulnerable countries cope with climate disasters and agreed the globe needs to cut greenhouse gas emissions nearly in half by 2030.
58) After China froze climate negotiations between the two countries this summer, US President Joe Biden and China President Xi Jinping agreed to reestablish US-China communications ( $\mathbf{N C O}^{*}$; text $\mathbf{F}$ ) when they met last week at the G20 summit in Bali, paving the way for Kerry and his Chinese counterpart Xie Zhenhua to meet again formally.
59) Salute Her UK, the sister charity of Forward Assist, which supports military veterans struggling to adjust to civilian life ( $\mathbf{N C O}^{*}$; text $\mathbf{I}$ ), is the only UK gender-specific support service to offer therapy and interventions for survivors of in-service sexual abuse.
60) Prior to the NFL’s first-ever game in Germany, Tampa Bay Buccaneers legend Mike Alstott called it "an honor" to be able to work with U.S. military members on Wednesday (NCOE; text C).
61) The most important utility of blood biomarkers is to make people's lives better (NCCs; text G) and to improve clinical confidence and risk prediction in Alzheimer's disease diagnosis," Dr Karikari said.
62) The most important utility of blood biomarkers is to make people's lives better and to improve clinical confidence and risk prediction in Alzheimer's disease diagnosis (NCCs; text G)," Dr Karikari said.
63) 'A blood test is cheaper, safer and easier to administer ( $\mathbf{N C C}_{\mathbf{A}}$; text G), and it can improve clinical confidence in diagnosing Alzheimer's'
64) "A blood test is cheaper, safer and easier to administer ( $\mathbf{N C C}_{\mathbf{A}}$; text G), and it can improve clinical confidence in diagnosing Alzheimer's and selecting participants for clinical trial and disease monitoring," Dr Karikari said.

Post-modifiers in noun phrases:

1) Running the 40 -yard dash, shuttles, broad jumping and quarterback competitions were among the drills that these members went through, while also interacting with two of the best to ever play the game (PMR; text C).
2) Alstott said he recently had a conversation about being one of the first teams to ever go overseas (PMR; text C) to play in London and remembering how cool of an experience that was.
3) In recent months Freya's room was the only one to be heated (PMR; text D) in order to keep her and her staff comfortable - but Ms Hunter said they have had to cut back.
4) Quick-thinking Miss Alam made up a story that her father had made her do it — and that she had messages to prove it (PMR; text E).
5) Salute Her UK, the sister charity of Forward Assist, which supports military veterans struggling to adjust to civilian life, is the only UK gender-specific support service to offer therapy and interventions for survivors of in-service sexual abuse (PMR; text I).
6) But he had a horror night to forget at Anfield (PMR; text J), putting the ball in the wrong net twice to condemn the Foxes to back-to-back defeats.
7) Former President Donald Trump is suing the House Committee investigating the Jan. 6 attack on the U.S. Capitol in an attempt to block a subpoena requiring him to testify (PMA; text A).
8) He said Trump had "engaged with the Committee in a good faith effort to resolve these concerns consistent with Executive Branch prerogatives and separation of powers (PMA; text A)," but said the panel "insists on pursuing a political path, leaving president Trump with no choice but to involve the third branch, the judicial branch, in this dispute between the executive and legislative branches.
9) He said Trump had "engaged with the Committee in a good faith effort to resolve these concerns consistent with Executive Branch prerogatives and separation of powers," but said the panel "insists on pursuing a political path, leaving president Trump with no choice but to involve the third branch, the judicial branch, in this dispute between the executive and legislative branches (PMA; text A).
10) Committee members allege Trump "personally orchestrated" a multi-part effort to overturn the results of the 2020 election (PMA; text A).
11) She said this had "saved her life" by giving her the chance to call for help (PMA; text E) while Richard looked for her phone.
12) And he claimed Ms Alam gave him permission to tie her up with cable ties (PMA; text E ).
13) The world has failed to reach an agreement to phase out fossil fuels (PMA; text F) after marathon UN climate talks were "stonewalled" by a number of oil-producing nations.
14) However, an attempt to address the biggest source of the planet warming emissions (PMA; text F) that are causing the climate crisis ended in a fiasco after a number of nations, including China and Saudi Arabia, blocked a key proposal to phase out all fossil fuels, not just coal.
15) However, an attempt to address the biggest source of the planet warming emissions that are causing the climate crisis ended in a fiasco after a number of nations, including China and Saudi Arabia, blocked a key proposal to phase out all fossil fuels, not just coal (PMA; text F).
16) The agreement to help the world's most vulnerable countries deal with loss and damage (PMA; text F) represents a breakthrough, however, in what has been a contentious negotiation process.
17) But while summit delegates affirmed the goal of keeping global warming to 1.5 degrees Celsius, climate experts expressed dismay about a lack of mention of fossil fuels, or the need to phase them down (PMA; text $\mathbf{F}$ ) to keep global temperatures from rising.
18) On Saturday, EU officials threatened to walk out of the meeting if the final agreement failed to endorse the goal to limit warming to $\mathbf{1 . 5}$ degrees Celsius above preindustrial levels (PMA; text F).
19) They were focused on specific action points, such as enhancing China's plan to reduce emissions of methane (PMA; text F) - a powerful greenhouse gas - and their overall emissions target, the source said.
20) The Supreme Court's decision said that the court will review the issue of whether the states have the right to intervene in the legal fight over Title 42 (PMA; text H).
21) In the dissent, Justices Neil Gorsuch and Ketanji Brown Jackson said that even if the court were to find the states have the right to intervene (PMA; text H) and Title 42 was lawfully adopted ".... the emergency on which those orders were premised has long since lapsed."
22) For example, when a judge ordered last year that Trump's "Remain in Mexico" policy to make asylum-seekers wait in Mexico for hearings in U.S. immigration court (PMA; text H) be reinstated, it did so with such limited scope that it had little impact.
23) The use of Title 42 to quickly expel migrants depends largely on Mexico's willingness to accept people from certain countries (PMA; text H) who are expelled from the United States.
24) It comes after a number of scandals have put pressure on the MoD to address problems surrounding how women are treated in the military (PMA; text I).
25) Refusal to report attackers (PMA; text I)
26) Conservative-leaning states appealed to the Supreme Court, warning that an increase in migration would take a toll on public services and cause an "unprecedented calamity" that they said the federal government had no plan to deal with ( $\mathbf{( P M}$ *; text $\mathbf{H}$ ).

Comparative clauses:

1) Both the federal government and immigration advocates have argued that the states waited too long to intervene ( $\mathbf{C C}$; text $\mathbf{H}$ ) and - even if they hadn't waited so long - that they don't have sufficient standing to intervene.
2) Both the federal government and immigration advocates have argued that the states waited too long to intervene and - even if they hadn't waited so long - that they don't have sufficient standing to intervene ( $\mathbf{C C}$; text $\mathbf{H}$ ).

Other:

1) Former President Donald Trump is suing the House Committee investigating the Jan. 6 attack on the U.S. Capitol in an attempt to block a subpoena requiring him to testify (CTC; text A).
2) The suit contends that, while former presidents have voluntarily agreed to provide testimony or documents in response to congressional subpoenas in the past, "no president or former president has ever been compelled to do so (CTC; text A)."
3) "Long-held precedent and practice maintain that separation of powers prohibits Congress from compelling a President to testify before it (CTC; text A)," Trump attorney David A. Warrington said in a statement announcing Trump's intentions.
4) The suit likely dooms the prospect of Trump ever having to testify, given that the committee is expected to disband at the end of the legislative session in January (CTC; text A).
5) The lawsuit comes as Trump is expected to launch a third campaign for president next week (CTC; text A).
6) Richards, 41 , was forced to live in a hotel (CTC; text E).
7) He added: "We have always said that it is imperative for the developed world to help the developing world to deal with the impacts of climate (CTC; text F)."
8) The summit was originally scheduled to end on Friday (CTC; text F), but went well into overtime with negotiators still trying to hammer out the details as the conference venue was being dismantled around them.
9) Citing an example, they say blood levels of neurofilament light - a protein marker of nerve cell damage - become elevated not only in Alzheimer's disease, but also Parkinson's and other dementias, causing its detection to be less useful (CTC; text G) when trying to differentiate Alzheimer's from other neurodegenerative conditions.
10) Tuesday's ruling preserves a major Trump-era policy that was scheduled to expire under a judge's order on Dec. 21 (CTC; text H).
11) The precise issue before the court is a complicated, largely procedural question of whether the states should be allowed to intervene in the lawsuit (CTC; text H).
12) Biden is scheduled [to] meet with Mexican President Andres Manuel López Obrador in Mexico City next month (CTC; text H).
13) The cases span a period of more than 20 years, with victims claiming a culture of fear and harassment has allowed sexual predators to operate freely at the academy (CTC; text I), which began admitting women in 1984.
14) In October, the Royal Navy was forced to launch an investigation into allegations of rape threats and sexual assault on board Britain's nuclear submarines (CTC; text I), whilst two Red Arrows pilots were sacked after evidence of a "toxic" culture emerged.
15) The world has failed to reach an agreement (CAT; text F) to phase out fossil fuels after marathon UN climate talks were "stonewalled" by a number of oil-producing nations.
16) On Saturday, EU officials threatened to walk out of the meeting if the final agreement failed to endorse the goal (CAT; text F) to limit warming to 1.5 degrees Celsius above pre-industrial levels.
17) Researchers also hope to test the method in those suffering from different stages of memory loss in future studies (CAT; text G).
18) "And courts should not be in the business of perpetuating administrative edicts designed for one emergency only because elected officials have failed to address a different emergency (CAT; text H).
19) She said a drinking culture was "rife" during her time at the academy and seemed to encourage inappropriate behaviour (CAT; text I).
20) Faes' second own-goal stemmed from Nunez's missed one-on-one, and he failed to make more chances count later in the day (CAT; text J).
21) Alstott will, of course, be pulling for his Bucs to beat Alexander's Seahawks (PC; text C), and he said Tom Brady's 55th game-winning drive of his career last week against the Los Angeles Rams is the spark needed to put them on a run moving forward.

Indeterminate:

1) "At the same time, we are advancing our preparations to manage the border in a secure, orderly, and humane way (IND - PMA vs. AAP; text H) when Title 42 eventually lifts and will continue expanding legal pathways for immigration," JeanPierre added.
2) Roberts, who handles emergency matters that come from federal courts in the nation's capital, issued a stay to give the court time (IND - PMA vs. AAP; text H) to more fully consider both sides' arguments.
3) Roberts, who handles emergency matters that come from federal courts in the nation's capital, issued a stay to give the court time to more fully consider both sides, arguments (IND - PMA vs. AAP; text H).
4) Kate Winslet has donated $£ 17,000$ to a mother facing a sky-high energy bill to operate her daughter's life support (IND - PMR vs. AAP; text D).
5) Scientists have developed a new test to detect signs of Alzheimer's disease (IND PMR vs. AAP; text G) based on markers in a blood sample, an advance that may lead to better risk prediction for the neurological condition.
6) In the latest study, researchers developed a new technique to selectively detect brain derived (BD)-tau (IND - PMR vs. AAP; text G) while avoiding free-floating "big tau" proteins produced by cells outside the brain.
7) In November, a federal judge sided with advocates and set a Dec. 21 deadline to end the policy (IND - PMR vs. AAP; text H).
8) The Biden administration still has considerable leeway to enforce Title 42 as aggressively or as leniently as it chooses (IND - PM* vs. AAP; text H).
9) On Saturday, EU officials threatened to walk out of the meeting (IND - CTC vs. NCO; text F) if the final agreement failed to endorse the goal to limit warming to 1.5 degrees Celsius above pre-industrial levels.
10) The Royal Military Academy Sandhurst is being urged to tackle a "toxic culture" of sexual assault (IND - CTC vs NCO; text I), with a charity saying hundreds of servicewomen had reported abuse during their training.
11) Ms Edwards, who is campaigning for the term "military sexual trauma" to be recognised by the MoD (IND - CTC vs. NCO; text I), said she felt such cases were often dismissed as "a couple of bad apples" by those within the military.
12) "It's a great experience for the people of Germany, and people to come out here (IND - NCCs vs. PMR; text C) and support the NFL and their teams."
13) "It's a great experience for the people of Germany, and people to come out here and [to] support the NFL and their teams (IND - NCCs vs. PMR; text C)."
14) "We are deeply disappointed for all the desperate asylum seekers who will continue to suffer because of Title 42, but we will continue fighting to eventually end the policy," said Lee Gelernt, a lawyer with the American Civil Liberties Union, which had been arguing to end Title 42's use (IND - NCO vs. AAP; text H).
15) After China froze climate negotiations between the two countries this summer, US President Joe Biden and China President Xi Jinping agreed to reestablish US-China communications when they met last week at the G20 summit in Bali, paving the way for Kerry and his Chinese counterpart Xie Zhenhua to meet again formally (IND CTC vs. AAP; text F).
16) Negotiators from nearly 200 countries at the COP27 UN climate summit in Egypt took the historic step of agreeing to set up a "loss and damage" fund meant to help vulnerable countries cope with climate disasters (IND; text $\mathbf{F}$ ) and agreed the globe needs to cut greenhouse gas emissions nearly in half by 2030.
17) "The coalition has held because of this conviction that we did need to stay together to deliver this - and to push the conversation (IND; text F)."
18) Sandhurst urged to tackle 'toxic culture' of sexual assault (IND; text I)
19) Gakpo entering the frame will only boost the Reds' prospects, with Luis Diaz and Diogo Jota also to return from injury (IND; text J).

[^0]:    ${ }^{1}$ According to Quirk et al. $(1985,1288-89)$, nominalization is a process of turning a clause or a verb into a noun/noun phrase.

[^1]:    ${ }^{2}$ Niehues (2005, 6-7) claims that there appears to be some gradience as far as verbs are concerned and certain verbs would fall somewhere between catenatives and full verbs.

