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COVID-19 and government communication

A descriptive pilot study of bilingual (DT - FR) crisis communication in Belgium

Vince Liégeois und Jolien Mathysen

Abstract

Government communication fulfils an important role in the battle against the COVID-19 pandemic. First, we rely on the government to provide us with all the necessary information regarding the danger entailed by SARS-CoV-2. Secondly, the government seeks to guide the population towards a certain behaviour through its various communicative channels. However, in comparison with other aspects of government action (e.g., new legislation, economic measures), the communicative actions of governments surrounding the COVID-19 pandemic have received less attention within the social sciences. Accordingly, this pilot study aims to delve into said communicative aspect from a descriptive text-linguistic point of view, looking at bilingual (DT - FR) COVID-19-related government communication in Belgium. To this end, we assembled a parallel corpus with texts from the Belgian Crisis Centre on the matter. Departing from the four textual criteria singled out by Gautier (2009) – (i) text function, (ii) text predicate, (iii) information structure and (iv) stylistic-formulative prototypical features –, we aspire to learn more about the communicative goals and strategies used by the Belgian govern-

ment and to compare these results to three previous studies on COVID-19-related government communication.

1 Introduction

The government plays a central role in times of disease outbreaks. In the case of the COVID-19 pandemic, society has been in a state of crisis and many of its sectors (economy, health care, work-life) have been compromised, with the government serving as the main actor to maintain social organisation (Li et al. 2020: 617-618; Masduki 2020: 97; Piller et al. 2020: 505). To this aim, governments can apply both coercive (i.e., legislation, regulation) and communicative (i.e., information, persuasion) tools (Dimitrov 2021: 2). The coercive aspect is featured in many discussions in public and scientific debate. The questions being asked in this regard are, among others, whether the government has the right to impose certain legislations/regulations regarding COVID-19 (constitutional law) and to which extent its economic measures are feasible and/or positive for the economy (public finances). The communicative aspect, however, has received considerably less attention in the social sciences. This discrepancy in research attention is not exclusive to studies regarding the COVID-19 pandemic. Johansson and Raunio (2019: 12), in fact, remarked that government communication has almost always been considered less important than other government actions (i.e., the more coercive ones).

Consequently, this paper aims to consider COVID-19-related government communication in more detail. More specifically, we will scrutinise government communication in the multilingual nation of Belgium, for which we compiled a bilingual (Dutch, French) corpus of communications from the Belgian Crisis Centre. As such, our contribution inquires into the communicative goals and strategies employed by the Belgian government to communicate about COVID-19. This research question is particularly relevant,

since various scholars in the fields of applied linguistics, political science and communication science have emphasised the importance of government communication. Still, few (empirical) insights exist on what such communication looks like, which communicative practices prove to be most effective and which purposes they seek to fulfil (Johansson/Raunio 2019: 134; 2020: 1140). Furthermore, the question arises whether differences in COVID-19-response efficiency between various nations might, in fact, be due to the different communication strategies they have been employing (Hyland-Wood et al. 2021: 1). Therefore, this contribution is intended to be a valid point of reference for future studies regarding COVID-19-related government communication in Belgium and across different nations.

The structure of our contribution is as follows: section 2 will elaborate on the phenomenon of government communication and discuss some of the first studies which have looked at COVID-19-related government communication. Section 3 lays out our methodology, which consists in our corpus discussion (subsection 3.1), on the one hand, and the clarification of our procedure, on the other (subsection 3.2). Section 4 discusses the results of said procedure and section 5 concludes the paper with a summary and notes for future research.

2 Government communication and the COVID-19 pandemic

The term government communication is not unambiguous: various definitions have been proposed in the literature (cf. Graber 2003; Pasquier 2012; Canel and Sanders 2013, 2016). Depending on which definition is chosen, the notion of government communication can range from including communication by the ministers and secretaries of state (i.e., the strict definition) to all spoken and written discourses issued by any governmental service (i.e., the

broad definition). For our own contribution, we will employ the definition formulated by Pasquier (2012: 1):

all the activities of public sector institutions and organizations that are aimed at conveying and sharing information, primarily for the purpose of presenting and explaining government decisions and actions, promoting the legitimacy of these interventions, defending recognized values and helping to maintain social bonds.

Departing from this definition, Pasquier (2012: 2-3) further distinguishes between several types of government communication, including, among others, (i) government communication under the auspices of heads of government and ministers, (ii) communication emanating from the administration, (iii) communication pertaining to public policy, (iv) institutional communication and (v) crisis communication¹. Although all these types of communication also play a role in the COVID-19 pandemic, the most relevant of these subtypes is, of course, crisis communication² (cf. Hyland-Wood et al. 2021).

At this point, we would like to discuss three studies which have already examined crisis communication with regard to the COVID-19 health pandemic: Losada and Rojano's (2020) study of government communication in Spain, Masduki's (2020) study on government communication in Indonesia and a theoretical paper by Hyland-Wood et al. (2021). The first study, Losada and Rojana's (2020), departed from Álvarez's (2009) observation that modern crisis management needs to depart from the study of the public, including

1 Crisis communication is, of course, not exclusive to government services. However, in this paper, we will use "crisis communication" exclusively to talk about "government crisis communication".

2 Even more so considering that our contribution departs from a corpus of communications from the Belgian Crisis Centre.

their perception and emotions. Consequently, with the help of on-line surveys, Losada and Rojano looked at how Spanish government communication tried to supply emotional support for the elderly population. The authors highlighted that news about the COVID-19 health pandemic generated different negative emotions: sadness, anxiety, fear, and anger. However, the (negative) emotions greatly depended on the information channel in question. Government communication (e.g., communication by official authorities), for instance, was considered to be among the most credible sources, and the government's efforts to communicatively accommodate the emotional need of the elderly was positively appreciated.

Masduki (2020) applied a political-economic approach to study the link between COVID-19 communication policies and practices, on the one hand, and the interests of politics and market stability in Indonesia, on the other. His analysis uncovered two main problems with Indonesian government communication: (i) that the communication, in itself, was pro-market communication, and (ii) that various data regarding COVID-19 had been manipulated to minimise the danger of the virus. Subsequently, Masduki (2020: 97) stated that Indonesian COVID-19 government communication was dominated by the need to consolidate the power of the ruling authorities and secure market stability.

Hyland-Wood et al. (2021) did not depart from empirical data. Instead, their paper emphasised the importance of trust, transparency, and civic engagement in crisis-related government communication and formulated 10 recommendations for such communications: (a) to engage in clear communication, (b) to strive for maximum credibility, (c) to communicate with empathy, (d) to communicate with openness, frankness and honesty, (e) to recognise that uncertainty is inevitable, (f) to account for levels of health literacy and numeracy, (g) to empower people to act, (h) to appeal to social norms, (i) to consider diverse community needs, and (j) to be proactive in combatting misinformation.

All three papers thus highlighted different challenges inherent to crisis communication. Therefore, it is imperative that such crisis communication is studied further, also involving different nations and different information channels. To this end, we studied Dutch and French COVID-19-related communications of the Belgian Crisis Centre from a descriptive text-linguistic point of view. Departing from the four textual criteria singled out by Gautier (2009), this study aims to uncover the communicative aims and strategies of the Belgian government on the matter. As such, we will also compare the results emanating from this analysis against the 10 recommendations from Hyland-Wood et al. (2021).

3 Methodology

3.1 Corpus

For our corpus, we assembled texts from the website www.info-coronavirus.be, which is managed by the Belgian Crisis Centre (hence BCC) and the FPS (Federal Public Service) Health, Food Chain Safety and Environment. It is one of the Belgian government's main communicative channels when it comes to COVID-19-related information. This is particularly interesting since Belgium, despite being a multilingual country, has no emergency language service (cf. Li et al. 2020). In the end, we collected texts spanning the period between January 28, 2020 (when the website was created and the first text regarding COVID-19 was published) and September 14, 2020. As such, our corpus mainly concerns the first wave of Belgian COVID-19 infections and the first lockdown.

The website has been offering information in four languages: Belgium's three national languages – Dutch, French, and German – and English. Our inquiry originally considered all three national languages. Yet, due to reasons of space, we will limit ourselves

to the Dutch and French language in this contribution, which are spoken by the majority of the Belgian population. To this aim, we established a parallel corpus (cf. Teubert 1996) of texts which could be found in all three languages (even though German was later excluded). This corpus ended up containing 220 texts per language. Consequently, our analysis can compare each text in the Dutch corpus to the relevant text in the French one. A first quantitative overview of this corpus is established in Tab. 1:

Tab. 1: Quantitative overview of the parallel bilingual corpus.

	Dutch	French
Texts	220	220
Tokens	99,534	110,517
Sentences	4,256	4,829

Please note, however, that this parallel corpus does not include all texts published on the www.info-coronavirus.be website during the time period considered here, but only those texts available in all three national languages. Originally, we found an inequivalent distribution of texts across the three languages, with French accounting for 250, Dutch for 249, and German for 220 texts. This, of course, is problematic with regard to Hyland-Wood et al.'s (2020) recommendation to consider diverse community – or in this case multilingual community – needs, which is particularly true for the German-speaking community.

3.2 Procedure

An important methodological question regarding government communication is how this type of communication should be researched (Hansson 2017: 326). For our own analysis, we chose to approach government communication from a descriptive and text-linguistic perspective. Hereto, we propose an analysis based

on the four textual criteria singled out by Gautier (2009) for the analysis of related texts or text genres: (a) text function, (b) text predicate, (c) information structure, (d) stylistic and formulative prototypical features. The four-pronged analysis we developed seeks to answer the following four questions in order to learn more about the communicative tools and strategies employed by the Belgian government:

Text function	Which speech act dominates the (domain-)specific texts, and can any secondary (minor) speech acts be observed?
Text predicate	What is the main predicate of the texts and can predicate shifts (= secondary predicates) be attested?
The information structure	Is there a common information structure shared by the texts?
Stylistic and formulative prototypical features	Which stylistic and formulative features characterise the texts, and how can they be connected with the previous 3 criteria?

Based on this analysis, we, first, in a corpus-based manner (cf. Stede [2007] 2018), singled out the main text function (subsection 4.1) and main text predicate (subsection 4.2), that is, the central theme, of each text in the two subcorpora. To establish the main text function (cf. Brinker et al. [1985] 2018: 87-124), we departed from the verbs in each text and determined which speech act they evoked (cf. Wunderlich 1983; Gautier 2009: 176). Thereafter, we counted the number of speech acts evoked per text to determine what the main text function was. For the main text predicate, we annotated the central predicate of each paragraph. Then, we considered whether these predicates resurfaced in more parts of the text and whether the different predicates of a text constituted an overar-

ching predicate (e.g., number of infections + number of hospitalisations + number of people in intensive care + number of deaths = epidemiological situation). The next step consisted in distinguishing between the different text genres present in Belgian COVID-19-related government communication. Based on the data from the first two criteria, we then grouped the texts and checked the information structure of the most prevalent text group(s). Information structure refers to the manner in which information is structured in and across texts (subsection 4.3). For the fourth step, we considered the stylistic and formulative prototypical features appearing in and/or across the different groups of texts (subsection 4.4). Finally, we compared these data against the theory established in our theoretical discussion of government communication in section 2 (subsection 4.5).

This methodology incorporates both deductive (speech act theory) and inductive methods ((b), (c) and (d)), as well as macrotextual (text function, predicate, information structure) and microtextual data (stylistic and formulative prototypical features). Based on this method, we will not only be able to single out the communicative strategies employed and the goals envisioned by the Belgian government (text function and predicate), but also which discursive features these strategies and goals entailed (information structure, stylistic-formulative prototypical features). As such, it allows us to establish a first descriptive overview of Belgian COVID-19-related government communication and reach a clear answer to our research question, which was formulated at the end of section 2.

However, a few differences with Gautier's (2009) methodology should be pointed out here. First, the approach of Gautier is formal and cognitively oriented, whereas ours is solely a descriptive approach, not taking into consideration cognitive aspects of language. Secondly, since Gautier's model is specifically envisioned for the study of text genres and text patterns, he aims for the second and third step of the model (analysis of text predicates and

information structure) to already take into consideration more microlinguistic aspects of language (Gautier 2009: 176-177). However, since our corpus of government communications entails different types of text genres (cf. subsection 4.3), and therefore more variation than a corpus of exemplary texts from a given text genre, we are only able to describe these steps at a macrolinguistic level, i.e., through the predicate analysis explained above and an analysis of information structure at the transphrastic level.

When it comes to the limits of our study, we would like to stress that our analysis only seeks to aptly describe Belgian COVID-19-related crisis communication based on the four criteria and the procedure above. This means that we will not be able to pinpoint all problems, such as orthographic errors (e.g., *fréquemments*³ instead of *fréquemment* "frequently" and *événements de mafsse* instead of *événements de masse* "mass events" in French) within these communications.

4 Results

4.1 Text functions

For the first part of our analysis, we looked at the main functions of the texts within our corpora, which rendered equal results for the two languages under consideration (cf. Fig. 1). In both languages we identified three main text functions: the informative text function, present in 214 (= 97.3 %) texts, the instructive-hortative text function, present in 4 (= 1.8 %) texts, and the emotive text function, which appears in 2 (= 0.9 %) texts.

The informative text function (1) implies that the text mainly seeks to inform the population about the coronavirus and pos-

3 This error occurs three times in the corpus.

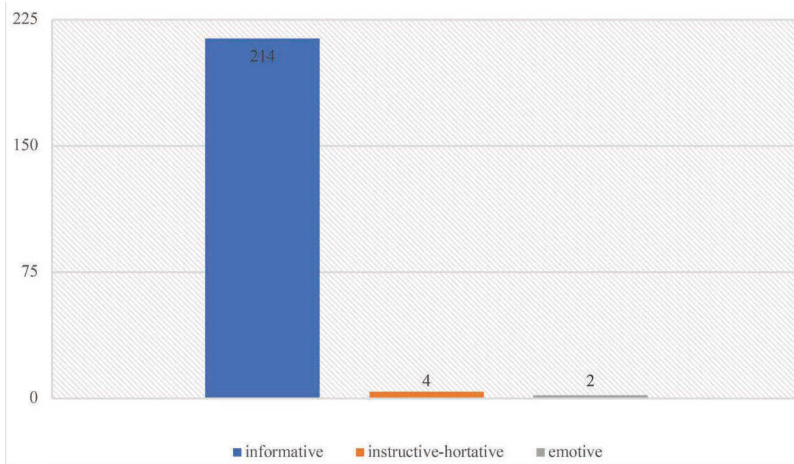


Fig. 1: Main text functions.

sible countermeasures, whereas the instructive-hortative one (2) seeks to instruct, implore and warn the population about the virus. The instructive-hortative function thus envisions a change in behaviour, while the informative one does not. Finally, the emotive text function (3) entails that the government tries to provide emotional support for the population, an aspect which, according to Losada and Rojana (2020), has been very important during the COVID-19 pandemic (cf. section 2). Examples for all three text functions are provided below.

- (1) Fr.: *Neuf compatriotes ont été volontairement rapatriés ce jour depuis Wuhan en Chine. Ils ont été transportés par un avion mis à disposition par le gouvernement français, qui a d'abord fait escale à Istres, près de Marseille, pour ramener les passagers français.*

“Nine compatriots were voluntarily repatriated today from Wuhan in China. They were transported by a plane made available by the French government,

which has first made a stop at Istres, close to Marseille, to pick up the French passengers.”

- (2) Fr.: [...] *Tenez bon et suivez les mesures générales, prenez soin de vous et des autres. Vous êtes malade (fièvre, toux, problèmes respiratoires, ...) ? 1. restez chez vous 2. contactez directement votre médecin traitant 3. suivez les recommandations du site web <https://www.info-coronavirus.be>.* “Hang in there and follow the general measures, take care of yourself and others. Are you ill (fever, cough, respiratory problems, ...)? 1. Stay at home 2. Immediately contact your treating physician 3. Follow the recommendations of the website <https://www.info-coronavirus.be>.”
- (3) Fr.: *Maggie De Block et Alain Maron, ministres de la Santé publique au niveau fédéral et bruxellois, ont le regret d’annoncer qu’un patient est décédé des suites du coronavirus. Il s’agit du premier décès en Belgique.* “Maggie De Block and Alain Maron, Ministers of Public Health on the federal level and in Brussels, regret to inform that a patient has died as a result of the coronavirus. It constitutes the first death in Belgium.”

In the example for the informative text function (1), no explicit speech act verb can be found, yet the mood (indicative) and diathesis (passive) are typical of informative speech acts. In (2), the instructive-hortative text function is marked through imperative verb forms (*Tenez bon et suivez ... prenez soin ...*) and personal deixis (*vous et des autres. Vous êtes malade [...]*?) (cf. Brinker et al. [1985] 2018: 110). The verb phrase *ont le regret*, in turn, evokes the emotive speech act in (3).

The data in Fig. 1 indicate, then, that the predominant function of the government communications considered here was to inform the public. However, when looking at secondary text functions –

i.e., all the other text functions identified in the texts apart from the main ones represented in Fig. 1 – we noticed that the instructive-hortative text functions become prevalent with 186 instances (= 84.5 % of the texts) (cf. Fig. 2). We thus found that the informative parts (e.g., depicting the evolution of the epidemiological situation/the virus) provide the fundament for the instructive-hortative text parts (e.g., the communication of countermeasures to stop the spread of the virus). Only a few exceptions to these patterns were found. Furthermore, eight texts (= 3.6 %) have an emotive secondary text function, six texts (= 2.7 %) – which all had either an instructive-hortative or emotive primary text function – an informative secondary text function, and five a metacommunicative one, meaning that they communicate linguistic information or information about the communication channels themselves.

Combining the data of Fig. 1 (main text functions) with those of Fig. 2 (secondary text functions), we can maintain that the informative text function is the most important one within our corpus: 214 of the 220 texts have it as their main text function, and it is the

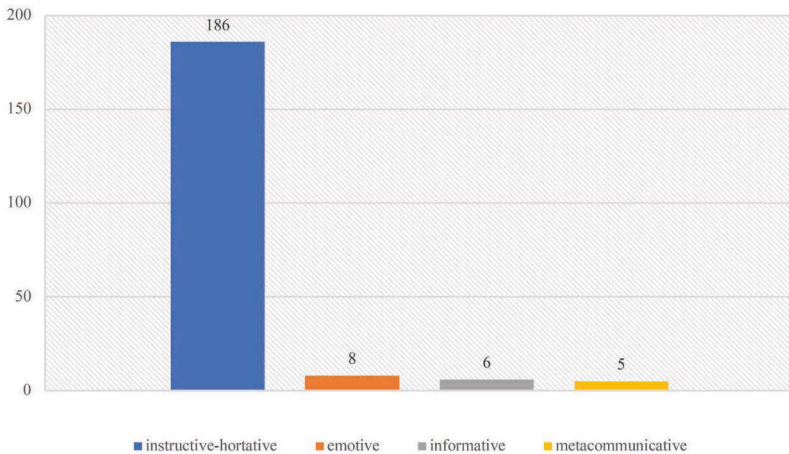


Fig. 2: Secondary text functions.

only text function that appears in all texts. Yet, this does not mean that the Belgian government had no eye for other communicative functions, since the instructive-hortative text function appears in 190 of the 220 texts (= 86.4 %), albeit only four times as the main text function. The emotive text function appears to have been given less attention, since it only surfaces in ten texts (= 4.5 %) and only two times as the main text function. The same is true for the metacommunicative function, which only appears three times as a secondary text function.

4.2 Text predicates

The second criterium that we considered were the text predicates, i.e., the central theme of each of the texts. Regarding the entire corpus, the main text predicate was, of course, COVID-19 or the coronavirus. The way in which the government communicated about the virus and highlighted some of its aspects or its influence on human life/society, however, varies from text to text. In this regard, we identified seven main text predicates: the epidemiological situation (AF = 178; RF = 80.9 %)⁴, government strategies (AF = 14; RF = 6.3 %), repatriation (AF = 8; RF = 3.6 %), face masks (AF = 5; RF = 2.3 %), tests (AF = 4; RF = 1.8 %), metacommunicative information (AF = 3; RF = 1.4 %) and emotional support (AF = 2; RF = 0.9 %) (cf. Fig. 3). Furthermore, a rest category named "other" was established for eight texts which did not share text predicates with other texts. Like with the text functions, our analysis rendered the same results for both languages⁵.

4 AF = absolute frequency, RF = relative frequency.

5 This equivalence between the Dutch and French corpora is, of course, expected, since both text function and text predicate are macrolinguistic phenomena (cf. subsection 3.2), which are generally unlikely to differ between a source and target text.

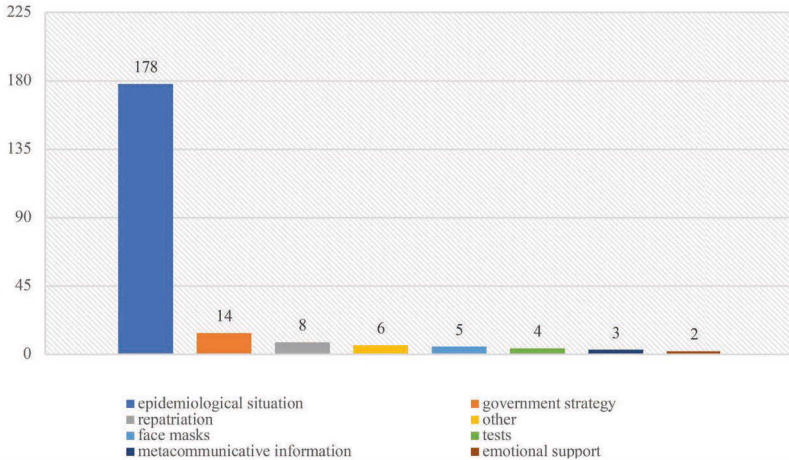


Fig. 3: Main text predicates.

The texts in which the epidemiological situation was the main predicate – and which make up the major part of our corpus (80.9 %) – distributed various kinds of epidemiological information: the number of new infections, the number of hospitalisations, the number of tests executed, the number of deaths due to COVID-19, the number of people in intensive care, etc. The texts which had government strategies as their main predicate transmitted information about the measures taken by the government (e.g., the closing of restaurants/bars and the incentive to start working from home), on the one hand, and the exit strategy to return society to its normal state (e.g., the reopening of schools), on the other. Texts about repatriation date back to the beginning of the COVID-19 pandemic, i.e., between February 2 and February 23, when residents of Belgium were repatriated from various countries, most notably China. Texts about face masks explained to which extent they were useful, which masks could (not) be used and how they should be used. Texts in which the main predicate was determined to be “tests” informed the population about the

government's testing strategies, where tests took place and how big the country's testing capacity was. The three texts on meta-communicative information, which correspond to the three meta-communicative secondary text functions singled out in subsection 4.1⁶, provided linguistic information or information about the various communicative channels used. Finally, the two texts which centred around emotional support, i.e., in which the emotive text function was the main one, appealed to the emotions of the population by providing condolence and comforting them.

Just as we distinguished secondary text functions in our analysis in subsection 4.1, we can also distinguish various "predicate shifts", i.e., those text parts which revolve around other predicates than the rest of the text. This again led to equal results for the two languages, which are presented in Tab. 2.

Tab. 2: Predicate shifts.

Predicate shift	AF	RF
to the information provided by the BCC	180	81.8 %
to anti-COVID guidelines	178	80.9 %
to the explanation of data representation	83	37.7 %
emotive predicate shifts	8	1.8 %
to hortative text parts (warnings/persuasion)	7	3.2 %

6 Even though we classified the predicate of the text as "metacommunicative information", we assigned the "informative text function" as their main function (cf. subsection 4.1) and the metacommunicative one as secondary text function, since most paragraphs of these texts did not transmit metacommunicative information.

to the epidemiological situation	5	2.3 %
to the health of infected persons	5	2.3 %
other (rest group)	5	2.3 %
to the repatriation process	3	1.4 %
to government strategies	1	0.4 %

The most frequently observed predicate shift was the one inciting people to keep updated on the information provided by the BCC (AF = 180), followed by instructive shifts telling people what to do to stop the spread of the virus (AF = 178). Both predicate shifts therefore imply an instructive-hortative text function (which was mostly the secondary text function evoked by these predicate shifts). The third most common predicate shift regarded the explanation of the data representation by the BCC: which data were presented, what they meant and why this kind of data representation was chosen. The other predicate shifts, which occurred in less than ten texts each, will not be discussed in more depth here.

Looking at the results of our text-predicate analysis, we can maintain our hypothesis formulated at the end of the previous section: namely, that the BCC mainly sought to inform and instruct/persuade the population to follow certain actions, rather than to provide emotional support. In this regard, we saw that most of the texts revolved around epidemiological information: 178 texts had the epidemiological situation as their main text predicate (cf. Fig. 3) and 5 others contained a predicate shift towards it (cf. Tab. 2). Furthermore, 83 texts (37.7 % of the texts) entailed a predicate shift which explained how and why epidemiological data were presented. Therefore, in the following subsection, we will look at the information structure of such epidemiological reports in more detail.

4.3 Text grouping and information structure

4.3.1 Text grouping

Based on our analysis of their text functions and text predicates, we were able to group our texts in the following way (Tab. 3):

Tab. 3: Text grouping.

Group of texts	Main text function	N° of texts
epidemiological reports	informative/instructive-hortative	178
government strategies	informative/instructive-hortative	14
repatriation reports	informative	8
other (rest group)	informative	6
texts on face masks	informative/instructive-hortative	5
texts on tests	informative	4
metacommunicative texts	informative	3
emotive texts	emotive	2

As explained in our methodology (cf. subsection 3.2), we also want to consider the information structure of the texts in our corpus. However, at this point, we would like to point out that Gautier's (2009) methodology was specifically devised for texts which are

classifiable as text genres (i.e., laws, weather reports). In our paper, we specifically speak of "text groups" instead of genres. This is because the texts of these "text groups" cannot necessarily be considered as text genres, despite there being correlations between their text functions and text predicates. Consequently, we cannot describe the information structure for each of the text groups individuated above. Therefore, we will limit our analysis of the information structure to the main text group of our corpus, the epidemiological report. Still, in the following subsection (cf. subsection 4.4), we will also distinguish those textual features which greatly characterise the information structure of the other texts in our corpus.

4.3.2 Information structure: epidemiological report

178 instances of the epidemiological report were found in our corpus, spanning the period from March 2 to September 14 (= the last text of our corpus, cf. subsection 3.1). When considering its information structure, we are able to differentiate four periods of time between which changes in the information structure could be observed (cf. Tab. 4).

The texts from the first period (02/03–12/03), which were all written at the beginning of the pandemic in Belgium, do not show a fixed information structure. However, we did identify recurring semantic categories revolving around the epidemiological situation (number of infections, tests, hospitalisations, etc.) in these texts (cf. [4.4.1]). Yet, from March 5 onwards, some texts started to show a recurring structure with the first paragraph elaborating on the number of tests and positive cases, and the second paragraph specifying the number of infections.

From March 27 onwards, we did not only observe a fixed information structure, but also the use of one and the same text format by the BCC. This means that from this date onwards, the BCC start-

Tab. 4: Epidemiological report - information structure - chronological classification.

Period	Publication dates	N° of texts	Information structure
Period 1	02/03–12/03	12	no fixed information structure
Period 2	27/03–11/04	14	fixed information structure (number of new infections + other data on the epidemiological situation + instructive/hortative text parts); use of types
Period 3	12/04–20/06	67	more extensive titles; fixed information structure; use of types
Period 4	23/06–14/09	85	new fixed information structure (epidemiological trends + actual situation on the local level + daily numbers + instructive/hortative text parts); use of types

ed publishing a near identical text every day. Only the statistics concerning the infections and deaths kept changing⁷. The attested information structure was the following: a first paragraph which elaborates on the number of new infections per region (Flanders,

⁷ The benefits and problems of this communication strategy (i.e., the repetitive use of a text format) are discussed in more depth in [4.4.3].

Brussels, Wallonia), followed by a paragraph which enumerates other epidemiological information, i.e., the number of hospitalisations, the number of people in intensive care, the number of people discharged from the hospital and/or declared healthy and the number of deaths. The final part of the texts entailed instructive/hortative predicate shifts to incite people to keep updated on the information provided by the BCC and to follow the prescribed anti-COVID guidelines. A minor change in the information structure of this format can be registered from April 10 onwards, when the reports also started to specify how many of the registered deaths had happened inside hospitals.

The same format was used in the texts from period 3 (12/04–20/06). Within the texts from this period, however, the BCC became more meticulous when it comes to the titles of the epidemiological reports. In period 2, in fact, they always used the same title, albeit with altering statistical data (4). In period 3, however, the titles started highlighting encouraging trends in the evolution of the epidemiological situation (5). It could be argued that this was done to stress the fact that the lockdown and other countermeasures against the virus were indeed having some effect and to remind people that said lockdown could come to an end soon.

- (4) a. Dt.: 1422 *nieuwe besmettingen met Covid-19*
"1422 new infections with COVID-19"
- b. Dt.: 1661 *nieuwe besmettingen met Covid-19*
"1661 new infections with COVID-19"
- (5) a. Dt.: *Aantal nieuwe hospitalisaties stabiliseert*
"The number of new hospitalisations stabilises."
- b. Dt.: *Het aantal patiënten op intensieve zorgen daalt*
"The number of patients in intensive care decreases."

Other than this, a minor change in information structure could be identified from April 14 onwards, after which the number of deaths in nursing homes was specified as well.

With the fourth period (23/06-14/09), we notice major changes in the communicative strategy employed by the BCC, which, in turn, led to a new text format being adopted. In order to represent the epidemiological situation more objectively, the BCC then started to publish weekly averages for the epidemiological numbers on top of the customary daily numbers. This led to the following information structure: one text part communicating weekly averages (regarding new infections, hospitalisations, deaths), one on the epidemiological situation on a local level, one on the daily numbers (infections, hospitalisations, hospital discharges, deaths) and another entailing instructive-hortative predicate shifts. Like within the previous two periods, one identical text (apart from the altering statistical-epidemiological data) is recycled every day.

To conclude this part of the analysis, we can state that, notwithstanding some changes over time and the more "freely constructed" epidemiological reports from the 1st period, a clear information structure can be observed within this text group. This is mainly due to the same text format being recycled time and again (see also the discussion of the text-genetic features in subsection 4.4). Furthermore, said reports also reflect our previous observations, i.e., that it was the BCC's main communicative aim to inform (e.g., the main text function of the reports) and instruct/warn people (i.e., the instructive-hortative predicate shifts at the end of the reports) about SARS-CoV-2.

4.4 Stylistic-formulative prototypical features

The final part of our text-linguistic analysis consisted in singling out the stylistic and formulative prototypical features of the two corpora in general, i.e., those features which are not exclusive to

one of the text groups identified in [4.3.1]. To this aim, we distinguished between lexical features [4.4.1], pragmatic features [4.4.2], and text-genetic features [4.4.3].

4.4.1 Lexical features

For the lexical features, we processed our two corpora through Sketch Engine (cf. Kilgarriff et al. 2014). Then, we looked at the first 100 entries in the keyword lists (both regarding single-words and multi-word expressions) provided by this computer-assisted corpus tool⁸. More specifically, we inductively established a semantic classification of the entries in these keyword lists. In doing so, we made a distinction between six "classes"⁹: 'epidemiology', 'government institutions', 'time', 'place', 'countermeasures' and a rest group denominated 'other'. The results of this lexical operation are presented in Tab. 5:

Tab. 5: Keywords.

	epidemiology	government institutions	time	place	countermeasures	other
S-Dt.	59	7	4	4	15	11
S-Fr.	54	7	3	14	8	14
M-Dt.	80	2	7	1	5	5
M-Fr.	52	18	7	7	11	5

8 This keyword list was established on the basis of the most frequent single-words and multi-word terms in the two corpora, on the one hand, and their frequencies in their respective reference corpora (nlTenTen14 and frTenTen17), on the other.

9 It should be noted that "classes" is not a synonym for "semantic categories", a term which was avoided here since not all classes – i.e., "epidemiology", "government institutions" and "countermeasures" – are semantic categories.

The most frequent class was ‘epidemiology’, which refers to all words inherent to the discipline of epidemiology which were found within our corpora (e.g., Dt.: *termijnindicatoren* “term-indicators”, *incidentie* “incidence”; Fr.: *coronavirus* “coronavirus”, *indicateur* “indicator”). In each of the corpora, they occupied more than 50 % of the first 100 entries in the single-words (S-) and multi-word terms (M-) keyword lists. In this case, we are also clearly dealing with domain-specific – i.e., scientific – terminology. This high frequency of epidemiologic terminology is, of course, mainly due to the high frequency of epidemiological reports in our two corpora, which require such terminology.

Other individuated semantic classes include ‘government institutions’ (e.g., Dt.: *veiligheidsraad* “security council”; Fr.: *SPF* “FPS”), which clearly highlight that we are dealing with government communication, ‘time’ (e.g., Dt.: *di-za* “Tue-Sat”; Fr.: *quotidiennement* “daily”) and ‘place’ (e.g., Dt.: *andere plaats* “other place”; Fr.: *territoire belge* “Belgian territory”). The semantic classes of ‘time’ and ‘place’ were important aspects of the epidemiological reports (cf. [3.1]), since they served to aptly describe the spread of the virus across time and in different parts of Belgium. We also established a class for COVID-19-related terminology regarding possible ‘countermeasures’ (e.g., Dt.: *quarantaine* “quarantine”; Fr.: *tracing* “tracing”). A rest category denominated ‘other’ was created for those words which were not easily classifiable in an overarching category. Still, many of these also referred to aspects of COVID-19 / the epidemiological situation or often occurred in the vicinity of epidemiology-related terms (e.g., Dt.: *nieuwsbericht* “news report”; Fr.: *constamment* “constantly”).

4.4.2 Pragmatic features

When it comes to the pragmatic features – that is, features regarding discursive elements and strategies above the sentence level – we observed various “foregrounding strategies” within our cor-

pus text. By foregrounding strategies, we mean that the BCC tried to highlight the most important information for the population. This made the texts more accessible and, in turn, could increase the chance of the proposed anti-COVID measures being followed. In this regard, we individuated five strategies or "foregrounding elements" (cf. Tab. 6).

As can be seen in Tab. 6, quantitative differences between the two corpora occur. Unlike with the analysis of the text functions and text predicates, we are now dealing with more microlinguistic as opposed to macrolinguistic phenomena. Such differences are thus expected to be more plentiful. Yet, this leads to the question why such dissimilarities between the two corpora are to be found and whether they hint at problems in the texts' translation practice. However, said questions fall outside the scope of our current contribution and should be treated by more translation-oriented inquiries.

Tab. 6: Highlighting markers.

	Dutch	French
imperative sentences	1,390	1,398
interrogative sentences	237	217
enumerations	573	586
text parts marked in bold	494	524
intersemioticity ¹⁰	156	154

¹⁰ By intersemioticity we understand the interplay between different semiotic systems ((written) language, pictures, graphics, tables, etc.).

The most frequent foregrounding elements are the imperative phrases (6), which were observed 1,390 times in the Dutch corpus and 1,398 times in the French one (on a total of 4,256 and 4,829 sentences). These sentences occurred both in the main text, as well as in subtitles, and were always part of predicative-hortative text parts:

- (6) a. Fr.: *Continuez à appliquer les conseils afin de vous protéger, vous et votre famille.*
 "Continue to apply the suggestions to protect yourself, yourself and your family."
 b. Dt.: *Limitez vos contacts rapprochés.*
 "Limit your close contacts."

Other than imperative sentences, we also found a lot of interrogative sentences (7): 237 for Dutch and 217 for French. Like the imperative ones, they appeared in both the main text and in subtitles. Within the latter, they also had a discourse organising function, meaning they directed the reader towards the pieces of information that they were looking for. Since their function is also clearly instructive and even educative, they were typical of the instructive-hortative text parts too.

- (7) a. Fr.: *Pourquoi le masque est-il recommandé?*
 "Why is the mask recommended?"
 b. Fr.: *Pourquoi porter un masque?*
 "Why wear a mask?"

Apart from these foregrounding elements on a more syntactic level, we also observed, on the level of text design¹¹, a high frequency of enumerations (573 for Dutch and 586 for French).

11 Please note that, by including text design within the analysis of pragmatic features, we employed a broad definition of "pragmatics".

This points to the BCC opting to present certain information in short and graphically clearly identifiable sentences rather than in longer paragraphs. These enumerative lists were, for instance, featured in the epidemiological reports. In this context, the lists summarised both epidemiological data (e.g., number of hospitalisations, deaths, etc.) and countermeasures to be followed to stop the virus (cf. [4.3.2]). Furthermore, again with regard to text design, we observed a high frequency of text parts marked in bold (494 for Dutch and 524 for French), which highlighted crucial information or keywords in the text.

As a final foregrounding element, we also noted the presence of other semiotic systems, e.g., images (156 for Dutch and 154 for French), highlighting either anti-COVID guidelines (6 for Dutch and French) or graphs depicting epidemiological data (150 for Dutch and 148 for French).

This “foregrounding strategy” can be regarded as an important communicative strategy in order to aptly communicate information and instructions to the Belgian population. This is especially true since, in the previous parts of the analysis, we argued that it was the BCC’s main goal to inform and instruct/warn the people. This can be seen in the examples in (6) and (7). Considering that these epidemiological reports also contain a lot of domain-specific terminology (cf. [4.4.1]), foregrounding elements are very useful to help make them more intelligible.

4.4.3 Text-genetic features

Finally, when it comes to the text-genetic features, we observed that the BCC often recuperated previously used sentences and text parts in their communication, or even the same text format, as was, for instance, the case for the epidemiological reports from March 27 onwards (cf. [4.3.2]). From a corpus-linguistic perspective, this led to a high tokens-per-type ratio and low type-token ra-

tio of both words and sentences. The sentence in (8), for instance, occurs 74 times in our corpus.

- (8) Dt.: *Zo helpt iedereen de voortgang van de pandemie te vertragen en de meest kwetsbaren onder ons te beschermen*
 "In this way, everyone helps to slow down the progression of the pandemic and to protect the most vulnerable among us."

This text-genetic feature of recuperating texts evokes another feature of crisis communication, which has not yet been highlighted in the three studies discussed in section 2, namely that a lot of information needs to be communicated quickly and/or in a consistent manner. Recycling text parts or using a fixed text format would, in this regard, be an economical way to communicate such pieces of information and also establishes consistency for the reader¹². This is even more the case for the multilingual communication the BCC needs to provide: instead of translating each text into French, German and English, the BCC could, in fact, also devise fixed text formats for each of these languages. This would, in turn, save them a lot of time and reduce the chance of translation errors. However, this communicative strategy also necessitates some amount of caution so as to avoid communicating unnecessary or incorrect information. This is what went wrong in (9), where the BCC first communicated the number of infections per region, but then continued to state that they had no information about the region of residence of the 0 remaining cases.

- (9) Dt.: *Op woensdag 20 mei werden 252 nieuwe gevallen gerapporteerd. Daarvan wonen er 175 in Vlaanderen, 56 in Wallonië en 21 in Brussel. We hebben geen informatie over de woon-*

¹² This strategy is, of course, not exclusive to crisis communication and can be seen as a common feature of controlled specialised texts in general (cf. Schubert 2009, 2014).

plaats van de overige 0 gevallen. Dat brengt het totale aantal bevestigde besmette personen op 56235.

"On Wednesday May 20 252 new cases were reported. 175 of them live in Flanders, 56 in Wallonia and 21 in Brussels. We have no information on the residence of the remaining 0 cases. That brings the total number of confirmed infected persons to 56235."

4.5 Comparison

When comparing the results of the four steps of our analysis with (i) one another, and (ii) those of previous studies on COVID-19-related government communication (Losada and Rojada 2020; Masduki 2021; Hyland-Wood et al. 2021; cf. section 2), we can note the following:

- First of all, we remarked in subsection 4.1 that the BCC was mainly concerned with informing and instructing/warning the population: the informative text function was present in all texts (214 times as main text function), and the instructive-hortative text function also appeared in 190 of the 220 texts. This observation was confirmed by the other steps of our analysis. In the last subsection, we noted the high frequency of various "foregrounding elements" – i.e., imperative sentences, interrogative sentences, enumerations, text parts marked in bold and intersemiotic (cf. [4.4.2]) – which had been employed to make information more accessible for the population. This can be regarded as a positive element within Belgian government communication. However, when looking at other text functions and/or communicative strategies, we saw that the BCC did not really seek to

provide emotional support – which had been stressed as an important element in crisis communication by Losada and Rojana (2020) – with only six texts displaying an emotive text function and two texts having been classified as “emotive texts”.

- When looking at the text predicates (subsection 4.2) and text groups (subsection 4.3), we found that epidemiological reports were particularly frequent within the corpus (178 of the 220 texts), which is why their information structure has been discussed in more depth in [4.3.2]. One of the consequences of their high frequency was, of course, that epidemiological terminology also greatly characterised our corpus (cf. [4.4.1]). Consequently, we can state that government communication by the BCC was highly permeated by scientific discourse. As such, due to the affinity of these texts to scientific, and more specifically, to epidemiological data, it seems unlikely that they display a framing in the interest of politics, market stability or in other (non-healthcare related) sectors. This is contrary to what Masduki (2021) found in his analysis of Indonesian COVID-19-related government communication. However, our analysis did not consider this possibility in more detail.
- Thirdly, comparing the discussion of our results with the 10 recommendations of Hyland-Wood et al. (2021), we can assert that the BCC tried to:
 - engage in clear communication (i.e., the use of the same text format, foregrounding elements, scientific information) and strive for maximum credibility (recommendations a and b);

- account for levels of health literacy and numeracy, i.e. the epidemiological reports (recommendation f);
- empower people to act, as exemplified by the instructive-hortative text parts (recommendation g);
- appeal to social norms, as is exemplified by the sentences in (2) and (8) (recommendation h);
- and be proactive in combatting misinformation, i.e., the predicate shifts to the information provided by the BCC (recommendation j).

Our analysis was not able to find indications which reflect recommendations (c), to communicate with empathy (that is, other than the small number of emotive text parts and functions singled out by our analysis), (d), to communicate with openness, frankness and honesty, (e), the recognition that uncertainty is inevitable and (i), to consider diverse community needs (other than, of course, the communication being made available in four languages, albeit with an inequivalent amount of texts – cf. subsection 3.1). The absence of these features might, however, have been due to the qualitative methodology we employed to examine these government communications.

Finally, the discussion of the epidemiological reports' information structure [4.3.2] and the entire corpus's text-genetic features [4.4.3] also led to us highlighting another aspect of crisis communication: namely that information needs to be communicated quickly and/or in a consistent manner. To this aim, the BCC often recycled text parts or text formats, which was an economical way to communicate and created consistency for the reader.

5 Summary and notes for future research

In this paper, we sought to describe COVID-19-related government communication in Belgium, and more specifically, crisis communication by the Belgian Crisis Centre. The relevance of this research question was explained in subsections 1 and 2, where we mentioned that little empirical research exists on this aspect of crisis management. In this case, we departed from the four textual criteria proposed by Gautier (2009): text functions (subsection 4.1), text predicates (subsection 4.2), information structure (subsection 4.3) and stylistic-formulative prototypical features (subsection 4.4). Along with a comparison with previous studies (Losada and Rojana 2020; Masduki 2021; Hyland-Wood et al. 2021), said analysis led to some interesting results. Among these, we deem to be most noteworthy (i) the informative and instructive-hortative nature of the texts, (ii) the texts being permeated with scientific discourse and (iii) the recycling of text parts/formats (cf. subsection 4.5). We would like to stress, however, that our observations result from the text-linguistic methodology presented in subsection 3.2, by which we have sought to descriptively depict COVID-19 government communication in Belgium. Consequently, our analysis did not discuss the possible problems entailed in these texts. Other more adequate approaches, particularly those oriented within the framework of critical discourse analysis (CDA) (cf. Fairclough 2013; Catalano/Waugh 2020), need to shed more light on this.

Regarding subsequent studies on COVID-19-related government communication in general, we would like to distinguish between three possible future research axes: research looking into (i) other forms of government communication in Belgium, e.g., distributed by public broadcast or by the ministers themselves, (ii) COVID-19-related government communication in other countries and (iii) comparative studies including government communications concerning other crises inside or outside of Belgium. We

hope that our descriptive study can serve as a valid point of reference for such possible types of studies.

Bibliography

- Álvarez, Jesús T. (2009): Gestión de la comunicación de crisis. Perspectivas. In: Carolina Moreno Castro (Ed.), *Comunicar los riesgos. Ciencia y tecnología de la información*. Madrid: Biblioteca Nueva Organización de Estados Iberoamericanos, 315-326.
- Brinker, Klaus/Cölfen, Hermann/Pappert, Steffen ([1985] 2018): *Linguistische Textanalyse. Eine Einführung in Grundbegriffe und Methoden*. Berlin: Erich Schmidt.
- Canel, Maria J./Sanders, Karen (2013): Introduction. Mapping the field of government communication. In: Karen Sanders/Maria J. Canel (Eds.), *Government communication. Cases and challenges*. London: Bloomsbury, 1-26.
- Canel, Maria J./Sanders, Karen (2016): Government communication. In: Gianpietro Mazzoleni (Ed.), *The International encyclopedia of political communication*. Chichester: John Wiley & Sons, 450-457.
- Catalano, Theresa/Waugh, Linda R. (2020): *Critical discourse analysis, critical discourse studies and beyond*. New York: Springer.
- Dimitrov, Roumen (2021): Silencing the virus? Government communication and MMR vaccination campaigns – the Australian case. *Public Relations Inquiry* 10(2). DOI: 10.1177/2046147X211014078
- Fairclough, Norman (2013): *Critical discourse analysis. The critical study of language*. London: Routledge.
- Gautier, Laurent (2009): Nochmals zum (Fach-)Textmuster. Von der Kognition zur Beschreibung einzelner Exemplare. In: Heike

- Baldauf-Quilatre / Jacques Poitou / Emmanuelle Prak-Derrington (Eds.), *Histoires de textes. Mélanges en l'honneur de Marie-Hélène Pérennec*. Lyon: Université Lumière Lyon, 171-181.
- Graber, Doris (2003): *The power of communication. Managing information in public organizations*. Washington DC: CQ Press.
- Hansson, Sten (2017): Government communication. In: Ruth Wodak / Bernhard Forchtner (Eds.), *The Routledge Handbook of Language and Politics*. Oxfordshire: Routledge, 326-341.
- Hyland-Wood, Bernadette / Gardner, John / Leask, Julie / Ecker Ullrich K. H. (2021): Toward effective government communication strategies in the era of COVID-19. *Humanities & Social Sciences Communications* 8. DOI: 10.1057 / s41599-020-00701-w
- Johansson, Karl M. / Raunio, Tapio (2019): Government Communication in a Comparative Perspective. In: Karl M. Johansson / Gunnar Nygren (Eds.), *Close and Distant. Political Executive-Media Relations in Four Countries*. Gothenburg: Nordicom, 127-148.
- Johansson, Karl M. / Raunio, Tapio (2020): Centralizing Government Communication? Evidence from Finland and Sweden. *Politics & Policy* 48(6): 1138-1160. DOI: 10.1111 / polp.12370
- Kilgarriff, Adam / Baisa, Vít / Bušta, Jan / Jakubíček, Miloš / Kovář, Vojtěch / Michelfeit, Jan / Rychlý, Pavel / Suchomel, Vít (2014): The Sketch Engine. Ten years on. *Lexicography* 1: 7-36.
- Li, Yuming / Rao, Gaoqi / Zhang, Jie / Li, Jia (2020): Conceptualizing national emergence language competence. *Multilingua* 39(5): 617-623. DOI: 10.1515 / multi-2020-0111
- Losada, José C. / Rojano, Francisco J. P. (2020): Government communication and emotions in the COVID-19 crisis in Spain. *Revista Latina de Comunicación Social* 78: 23-40.

- Pasquier, Martial (2012): Government communication. In: Louis Côté/Jean-François Savard (Eds.), *Encyclopedic dictionary of public administration*. URL: www.dictionnaire.enap.ca
- Piller, Ingrid / Zhang, Lie / Li, Jia (2020): Linguistic diversity in a time of crisis. Language challenges of the COVID-19 pandemic. *Multilingua* 39(5): 503-515. DOI: 10.1515/multi-2020-0136
- Masduki, Masduki (2021): Blunders of Government Communication. The Political Economy of COVID-19 Communication Policy in Indonesia. *Jurnal Ilmu Social dan Ilmu Politik* 24(2): 97-111. DOI: 10.22146/jsp.57389
- Schubert, Klaus (2009): Kommunikationsoptimierung. Vorüberlegungen zu einem fachkommunikativen Forschungsfeld. *Trans-kom* 2(1): 109-150.
- Schubert, Klaus (2014): Barrierefrei, reguliert, gelenkt. Prinzipien optimierenden Eingreifens in Sprache und Kommunikation. In: Susanne J. Jekat / Heike E. Jüngst / Klaus Schubert / Claudia Villiger (Eds.), *Sprache barrierefrei gestalten. Perspektiven aus der Angewandten Linguistik*. Berlin: Frank & Timme, 201-220.
- Stede, Manfred ([2007] 2018): *Korpusgestützte Textanalyse. Grundzüge der Ebenen-orientierten Textlinguistik*. 2nd ed. Tübingen: Narr.
- Teubert, Wolfgang (1996): Comparable or Parallel Corpora? *International Journal of Lexicography* 9(3): 238-264.
- Wunderlich, Dieter (1983): *Studien zur Sprechakttheorie*. 3. Aufl. Frankfurt am Main: Suhrkamp.