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RESEARCH

Directives as Health Communication: A Corpus-Based Study

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Abstract

Our understanding of directives is derived from extensive theoretical and empirical work conducted in pragmatics and related disciplines. However, this predominantly draws on spoken discourse and small-sized or elicited datasets. To study directive use, our study drew upon representations of a genre labelled 'guidance'—a one-million-word corpus of documents prepared and published by the UK Government communicating preventive actions relating to the Covid-19 pandemic. We used established corpus methods to identify novel ways of performing directives in relation to existing taxonomies and the unique context set by the pandemic—a situation where the government, on the basis of emerging science and emergency legislation, both suggested and imposed protective actions that impacted on most aspects of daily life at population level. We identified directives by exploring the co-texts of the lexical verbs used in the corpus, sampled using keyness as a measure of prominence. Our taxonomy of directives integrated an eclectic range of forms and strategies, showing guidance to be a hybrid genre, combining legal discourse with risk and health communication. The detection of directives permitted reflection on the different combinations of forms and actions in the context of health communication and highlighted the challenges and opportunities related to identifying directives at scale in a corpus.

Keywords Directives · Health communication · Written discourse · Keyword analysis

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Introduction

Nearly half a century ago Searle (1979: (vii) raised the question "How many ways of using language are there?" Half a century later, after extensive empirical research, we are not even able to say how many ways of doing directives there are – despite them being the most ubiquitous and most thoroughly examined speech acts. Directives have been analysed empirically in different subdisciplines of linguistics, such as cross-cultural and interlanguage pragmatics (e.g., Blum-Kulka et al., 1989), historical pragmatics (e.g., Kohnen, 2008), children's language development (e.g., Gordon & Ervinn-Tripp, 1984) and conversation analysis (e.g., Zinken & Ogiermann, 2013), with each of them relying on different types of data and methods of analysis. Various taxonomies have been proposed over the years in an attempt to capture all forms associated with directive speech acts. Yet, these taxonomies are far from complete, generally being contextually limited and focussing on spoken language.

The present paper provides an analysis of directives occurring in a corpus derived from documents prepared and published by the UK Government during the Covid-19 pandemic specifying preventive actions. The Covid-19 pandemic brought about an unprecedented situation whereby governments had to communicate constantly evolving policy agendas to a wide range of stakeholders, simultaneously addressing the general public, local businesses, the third sector and organisations at different levels of government. While much was communicated via regular public address and the mass media, the largely ignored basis for the updates was provided by substantial, constantly updated online documentation of emerging science and the ensuing legislative changes and health messaging. By providing a digitally accessible source of up-to-date information, these documents presented a critical reference point both for taking up mitigating actions and for their enforcement in response to a dynamic and layered risk scenario.

Research conducted during the pandemic raised questions about how well the information they contained was understood across its diverse audience, for instance, in terms of its readability (Khan et al., 2021). However, there has been no work examining the ways in which public understanding of protective behaviours was mediated through directive speech acts. Drawing on the government term of reference for these documents, we refer to this corpus of texts as 'guidance'—a label for a genre that combines elements of legal texts with health communication and instructional writing within a context in which the emergency legislation on which it was based was being crafted and updated to respond to the changing threat and emerging science. It is therefore an interesting and novel source of data for pragmatic inquiry, providing new insights into the study of directive speech acts.

Our exploratory study adopted an inductive corpus linguistics approach to identify and classify the directives used in texts posted on the UK government's website between March 2020 and July 2021. The quantitative affordances of corpus software permitted an inclusive approach, enabling the analysis of all the texts posted during this period and uncovering patterns within a large body of text (Brezina, 2018; McEnery & Hardie, 2012), exceeding one million words in the present study. Drawing upon a qualitative analysis of a downsample to validate our use of quantitative corpus tools to identify directive forms, we also offer methodological insights into

the utility of corpus linguistics tools in identifying pragmatic function based on quantitative analysis of language forms. Through this systematic analysis of how directive forms related to the behaviour regulating function of guidance, we accessed an unexplored genre critical to population level health communication. The study thus makes an original contribution to the study of directives and of the use of corpus approaches to pragmatics.

Before outlining and discussing the data, our corpus-based methodology and key findings, we will present a thorough account of theoretical and empirical work on directives, including corpus pragmatic approaches to identification.

Literature Review

Categorising Directives

Directives became a research focus as a pragmatic category proposed by Searle (1976), who defined them as "attempts (…) by the speaker to get the hearer to do something" (1976, p. 11). Building on Austin's work, Searle lists a range of performative verbs such as 'ask', 'order', 'command', 'request', 'beg', 'plead', and 'advise' (ibid.) to indicate different types of directive speech acts. He does not, however, consider the linguistic forms that the directive speech acts he lists can take.

In his 1975 paper on indirect speech acts, in contrast, Searle includes a list of over forty "sentences that could quite standardly be used to make indirect requests and other directives such as orders" (1975, p. 36). These sentences are grouped into six categories (1975, pp. 36-39):

> Sentences concerning H's ability to perform (e.g., Can you X?)
> Sentences concerning S's wish or want that H will do A (e.g., I would like you to X)
> Sentences concerning H's doing A (e.g., Will you X?)
> Sentences concerning H's desire or willingness to do A (e.g., Would you mind X?)
> Sentences concerning reasons for doing (e.g., You should X)
> Sentences combining several categories (e.g., I would appreciate it if you could X)

This categorisation relies on introspection and does not specify which sentences function as requests and which as orders or, in fact, other directive speech acts. Meanwhile, Ervin-Tripp (1976), working with contextually varied empirical data, observes that directives take on a wide range of forms and are often performed indirectly, but are easily identifiable as they lead to some form of action (1976, p. 26). Yet, she acknowledges the difficulties involved in locating directives, especially in observational data. She admits that "cases have probably been lost in which statements or questions meant as directives were oblique and rested on pre- suppositions unknown to the observer" and that "we have imputed directive intent perhaps when it was not

there" (1976, p. 28). She proposes the following directive categories (1976, p. 29), each of which is illustrated with numerous, quite varied examples:

Need statements (e.g., I need a match.)
Imperatives (e.g., Gimme a match.)
Imbedded imperatives (e.g., Could you gimme a match?)
Permission directives (e.g., May I have a match?)
Question directives (e.g., Gotta match?)
Hints (e.g., 'The matches are all gone.)

The broad variety of contexts in which Ervin-Tripp's data was collected effectively illustrates the complex nature of directives, the multitude of forms they take and their reliance on contextual factors, such as intimacy, power relations, and varying professional roles and settings.

Politeness theory, drawing on "naturally occurring, elicited, and intuitive data" (Brown & Levinson, 1987, p.11) from English, Tamil, and Tzeltal, offers a more systematic account of these factors. And interestingly, although Brown and Levinson's theory is about politeness more broadly, most of the examples they provide are of directive speech acts. Within their theory, politeness—strongly associated with indirectness—is motivated by considerations of face. The higher the face threat, which is determined by social distance, power and imposition, the greater the need for a less direct and more polite strategy. Brown and Levinson distinguish between three different levels of in/directness: Off-record strategies (implicatures to be inferred by the hearer), bald on-record strategies (such as bare imperatives), and on-record strategies which are mitigated by redressive action. The distinction between off-record and on-record is reminiscent of Ervin-Tripp's criteria which distinguishes hints, which "require considerable knowledge of the situation" (1976, p.42), from directives "in which agent and object are explicit" (1976, p.33). Her category of explicit (on-record) directives includes imperatives as well as imbedded imperatives which contain additional forms (redressive action in Brown and Levinson's terms).

The most frequently cited and applied taxonomy of directive speech acts, however, was proposed by Blum-Kulka and colleagues in 1989. This taxonomy is the result of many years of close analysis of experimental data eliciting directive speech acts—with earlier versions discussed by House and Kasper (1981) and Blum-Kulka and Olshtain (1984)—in five languages (Canadian French, Danish, English, German and Hebrew). While the authors refer to requests rather than directives, the different levels of directness in their taxonomy accommodate strategies that can serve as orders (e.g. mood derivable), advice (e.g. obligation statements) or suggestions (e.g. suggestory formulae), as well as other directive speech acts. They propose a scale of in/directness comprising three levels of directness—corresponding to those outlined by Brown and Levinson) and nine associated strategies (Blum-Kulka et al., 1989, p.18, examples modified).

Direct Strategies

Mood derivable Clean the kitchen.
Explicit performatives I'm asking you to clean the kitchen.

Hedged performatives I'd like to ask you to clean the kitchen.
Obligation statements You should clean the kitchen.
Want statements I want you to clean the kitchen.

Conventionally indirect strategies

Suggestory formulae How about cleaning the kitchen?
Query preparatory Could you clean the kitchen, please?

Non-conventionally indirect strategies (hints)

Strong hints You have left the kitchen in a right mess.
Mild hints The kitchen could use a good clean.

The great advantage of this taxonomy is that, apart from identifying and classifying the so-called head acts, it also provides a comprehensive list of different types of internal and external modification. At the same time, it needs to be borne in mind that this detailed taxonomy has been derived from responses to just eight situations elicited by means of a written discourse completion test (DCT).

While directives examined in other forms of data all seem to fit into the three main categories of in/directness distinguished by Blum-Kulka et al., given the centrality of conventional indirectness in DCT data, the two strategies representing it do not do justice to the huge variety of forms that have been identified in other types of studies. Aijmer's (1996) taxonomy of requests, for instance, based on the London-Lund Corpus, includes as many as 18 request types, approximately half of which can be classified as conventionally indirect.

While all the above discussed categorisations focus on spoken data, written directives have been mainly examined in legal text corpora (e.g., Diani, 2019; Gotti, 2014; Trosborg, 1995). Although these studies are highly relevant to the present one, they have, with the notable exception of Trosborg (1995), predominantly focused on deontic modality, given the clear identifiability of modal verbs in language corpora. Trosborg's approach, instead, was broader, as she searched her corpus of contract law texts manually. She found that the categories making up most of her data are directives expressing prohibition and obligation, directives giving permission, and so-called constitutive rules. The final category consists of statements with legal effect, often containing verbs such as *to apply, to extend* or *to mean*, that establish rules and regulations, i.e. the terms of the contract.

The only attempt at classifying directives in the context of risk communication that we are aware of is Vincent et al.'s (2023) paper on directives delivered during public briefings and press conferences by state leaders during the Covid-19 pandemic. Although their data is spoken, it is essentially pre-written, drawing on the same emerging science and emergency legislation as the documents under scrutiny here.

The authors declare their study to be the first "rigorous analysis of the use of directives in crisis communication in general and more specifically in Covid-19 briefings" (2023, p. 12) through which they develop a taxonomy of 16 types of directives (2023,

pp. 6-7). Upon closer inspection, however, only five of these categories can be clearly identified as directive types, namely: imperatives, performatives (e.g., *we ask*), obligation statements (e.g., *you should*), periphrastic modals (e.g., *it is prohibited*) and what the authors refer to as 'impersonal', i.e. constructions introduced by expressions such as 'it is vital/essential'. Some categories could be regarded as declarations rather than directives. Their category of hints is exemplified with 'It will still be possible for the police to break up large gatherings', which could be interpreted as informing about new legislation rather than telling people what to do. This distinction between declarational and directive functions has been previously problematised in the context of legal texts (Allott & Shaer, 2018; Searle, 1976; Trosborg, 1995). Unlike legislative texts, however, which do not address specific audiences directly in real time, the analysed speeches do, making the contrast more evident.

The above-mentioned studies by Aijmer (1996), Trosborg (1995) and Vincent et al. (2023), employed a corpus-based approach that ultimately relied on manual analysis of small-scale corpora. This points to tension in the use of corpus linguistics tools to study regularities in form-to-function correspondences in authentic data.

Directives in Corpora

The use of corpus-based methods to identify directives and other speech acts in larger scale datasets is characterised by its eclecticism. Pragmatic annotation, the so called "holy grail" for corpus pragmatic research (Clancy & O'Keeffe, 2015), is the most reliable method. Ronan (2022), for instance, analyses directives in a pragmatically annotated corpus of spoken Irish English. However, this approach, notwithstanding its own challenges, e.g. potential lack of precision in tagging assignment (Rühlemann & Aijmer, 2015), relies on the availability of a suitable annotated corpus or, as annotation is ultimately reliant on manual analysis, the resources to create one. Other studies have constructed enquires around the use of illocutionary force indicating devices (IFIDs), e.g. *thanks* for thanking (Schauer & Adolphs, 2006) and *sorry* for apologising (Deutschmann, 2003). Other studies have focused on common lexicogrammatical patterns (Jucker et al., 2008), e.g. noun phrase + linking verb + (intensifier) + positive adjective for compliments (Manes & Wolfson, 1981).

Such sampling approaches can be problematic in the case of directives, where retrieval through corpus queries is limited by the absence of common IFIDs and the manifold range of forms used in their expression. For instance, in historical pragmatics, where the primary goal is to "arrive at an ideally complete inventory of the linguistic forms" (Busse, 2008, p. 85), the size of some of historical corpora can mean restricting the analysis to an "eclectic" list of forms based on existing knowledge of the speech acts and their use in the relevant genres and period (Kohnen, 2008). Some authors have limited their inquiry to the illocutionary marker *please*, e.g. Wichmann's (2004) study of directives in a 1-million corpus of spoken English. Others have opted for a function-to-form approach, drawing upon qualitative analysis of a downsample of texts as a prelude to the use of corpus tools (O'Keeffe, 2018). This approach involves establishing a relationship between the forms in the sample that have been identified manually as signals of a particular type of illocutionary force and the corpus as a whole. Identifying directive and commissive speech acts in a corpus

of legal contracts, Blom and Trosborg (1992) conducted a series of supplementary tests to assess the extent to which the speech acts identified manually in the sample were homogeneous with the complete corpus. Underlying all these approaches is the acknowledgement that surface forms are an unreliable indicator of directive force, with a consequent need for induction and manual analysis. In the absence of pragmatic annotation, large scale corpus enquiry of directives can therefore require a degree of compromise—for instance, working with a smaller sized corpus to allow for manual analysis (Reinhardt, 2010), or restricting directives to an eclectic range of form to function relationships (Hyland, 2002).

Our study extends current corpus pragmatic research by applying corpus-based analysis to the study of directives in official UK government documentation on COVID-19 published on the gov.uk platform between March 2020 and July 2021. During the pandemic, the website published information on emergency legislation and provided information about mitigating exposure risk based on the emerging science about the virus. Defined as 'guidance', these texts and the directives they contained, represented a document of the relationship between the state and the general public during a time of crisis. Our study is thus a departure from existing work on directives based on spoken data, or historical texts.

While there are overlaps with the work on directives in legal texts, which also have a behaviour-regulating function (e.g., Diani, 2019; Gotti, 2014; Trosborg, 1995), the texts in our corpus do not constitute the law in the sense of being "world creating" (Allott & Shaer, 2018). Instead, they serve to mediate the emergency legislation on which they were based. As such, our investigation has more in common with analyses of directives in speeches by political leaders during the pandemic (Marsen & Ali-Chand, 2022; Vincent et al., 2023).

Methodology

Our primary aim was to provide a comprehensive account of the most prominent directive forms in our corpus. As existing typologies of directives have been derived primarily from spoken data, we decided to work inductively. Adopting what Ädel and Reppen (2008), in their review of form to function corpus-based enquiry, refer to as frequency-based listing, we drew upon keyword analysis as an entry point into the dataset. As we account for below, a directive typology was developed from an exploration of concordances containing lexical verbs identified from this analysis.

COVID Guidance Corpus (COAD-UK)

The data from the corpus was accessed using the Wayback Machine, which allows users to interact with a digital archive of web pages, even if a site no longer exists. The digital archive captures all the updates to the page including the files associated with each version. It was thus possible to locate and download the files posted on gov.uk between the initial imposition of social distancing restrictions (March 2020) and their phasing out (July 2021). We sought to include all documents that contained information that had the purpose of regulating, changing or otherwise influencing

public behaviour in response to UK containment policies and emergency legislation responding to contagion risk. These policies and underlying legislation were wide-reaching in scope and subject to constant revaluation, including messaging around specific policies, e.g. social distancing and quarantine procedures, and their application to government regulated services, e.g. driving tests and education. We removed duplicates or near duplicates of texts that were posted within close succession of one another, in each case retaining the most up to date version, as well as documents that originated on external sites (e.g. NHS). The criteria used to compile the corpus were the following:

Criteria for Inclusion

- Texts were posted on gov.uk platform between March 2020 and July 2021
- Texts contained public facing information on managing contagion risk related to the implementation of, or changes to, emergency legislation as part of UK containment policies and legislation

Criteria for Exclusion

- Texts with a primary focus on a government service or sector, with minimal content specific to the pandemic
- Duplicates and near duplicates
- Texts authored by another source (e.g., the NHS)

All documents underwent extensive cleaning, including the removal of hyperlinks, formulaic headers/footers, and were formatted for analysis. Individual files were coded using 42 distinct topic tags, which were grouped under 12 overarching categories (Table 1).

Identifying Directives

A typology of directive forms was identified inductively in an iterative process combining the use of corpus tools and a qualitative analysis of a sub-sample. We conducted a keyword analysis to identify the most prominent forms in our corpus. Based on COAD-UK's hybridity, e.g. combining advice giving and legal discourse, we opted for a comparison with a general reference corpus. Using LancsBox X (Brezina & Platt, 2024), we drew a comparison with the British National Corpus 2014 (Brezina et al., 2021; Love et al., 2017) based on the Log Likelihood statistic. While the utility of this statistical measure for keyword identification has been questioned based on the issues concerning accurately reflecting the size of the frequency difference (Gabrielatos, 2018), it remains a useful indicative measure for identifying salient lex-

Table 1 Distribution of topics and subtopics

Topic	Example sub-topics	Documents	Tokens
1. Businesses	Guidance for businesses	14	44,694
2. Accessing support	Childcare, benefits guidance	10	48,573
3. Education	Guidance for parents and schools, closures of schools	19	80,750
4. Employment	Essential workers, unpaid care, volunteer guidance	40	82,063
5. Facilities	Care homes, prison guidance	26	132,475
6. Vulnerable groups	Multigenerational households, extremely vulnerable people	23	63,956
7. Testing	Testing guidance, quarantine guidance	18	38,552
8. Travel and transport	Travel advice (international), driving tests/ lessons	75	209,225
9. Events	Religious festivals, funerals	30	97,045
10. Messaging	Face covering, stay safe outside	47	132,844
11. Activities	Singing guidance, sports guidance	14	64,505
12. Government strategy and general guidance	Action plan, general advice	60	218,262
Total		*376*	*1,212,944*

The corpus we used for this study thus consists of 376 documents, totalling 1,212,944 tokens.

ical items in a specific genre (Sönning, 2023)[1]. We set the critical value at 13 and set a filter based on a relative frequency of less than 30. Amongst the list of keywords were directive forms identified in previous studies—most notably the modal verbs *should, cannot* and *must*, but also periphrastic modal forms *e.g. need (to*) and iterations and derivations of verbs with a performative function, e.g. *advised, request*. In the interest of maintaining induction, we did not investigate these directly but focused on a subset of keywords used to refer to the regulatory actions themselves. These occurred as a mixture of finite (e.g., *travel* and *self-isolate*) and non-finite (e.g., *maintaining*) verb forms. In identifying these forms, it was necessary to differentiate nominalised forms (e.g., *distancing*) as well as cases where noun and verb forms (the corpus was

[1] We also considered effect size as a filter, but even a low effect size threshold (LR<0.5) excluded lexical verb forms used for advice, such as dry and have, based on their high frequency in British English in general.

untagged) were potentially the same (e.g., *test, contact, covering, support, face, care* and *transport* all occurred as nouns). Scrutiny of the KWIC list containing these forms identified 142 lexical verb forms that referred to advised actions (Table 2).

Using the concordancing tool in AntConc (Anthony, 2024), the third author conducted an analysis of the co-texts of each of the lexical verbs. Guided by the definition of directives as "attempts (…) by the speaker to get the hearer to do something" (Searle, 1976: 11), she identified patterns of co-occurrence with linguistic forms that expressed directive force when used jointly with an action verb. Based on the analysis of concordance lines, whereby the first 200 had been taken as the saturation threshold, a list of candidate directive forms was drawn up and organised into an initial typology.

In order to assess the strength of the analysis, we employed a double-blind approach in which the first and second authors conducted an independent manual analysis. To select a stratified sample of texts, we organized the corpus into the 12 topics and subdivided these further based on date of publication into an early (Mar-Aug 2020), mid- (Sept 2020- Jan 2020) and late (Feb 21-June 21) phase. For each topic, we randomly selected a text for each phase, yielding a sample of 36 texts, constituting 12.9% (156,620/1,212,944) of the entire corpus. The sample thus represented a wide range of topics and the full timescale of the corpus. Running concurrently to the corpus analysis, the first and second authors identified directive forms based on a close reading of the individual texts, thus also arriving at an initial typology of directives. While these manual analyses were guided by previously established taxonomies of directives (see section "Categorising Directives"), given the novelty of the corpus, they were based on a principle of maximal inclusivity and showed sensitivity to how

Table 2 Lexical verbs expressing preventive actions in order of keyness

Physical and cognitive actions	travel, contact, self-isolate, travelling, self-isolating, attend, stay, ensure, visiting, avoid, wear, wash, minimize, take, reduce, provide, staying, use, apply, help, consider, limit, sanitise, maintain, attending, remain, arrange, close, tested, providing, protect, meet, check, arrive, open, wearing, washing, touching, singing, leave, working, return, provided, keep, ensuring, entering, plan, refer, isolate, inform, protecting, dispose, undertake, taking, maintaining, seek, maintained, touch, limited, prevent, using, hire, returning, sharing, remove, arriving, avoiding, communicate, viewing, disposed, self-isolating, completing, manage, keeping, chanting, isolating, issuing, collecting, gather, self-isolate, shield, receiving, accessing, reducing, shouting, collect, notify, shopping, conducting, socializing, disposing, assist, have, request[a], changing, skating, find, discuss, ask[b], arranging, cycling, swab, cover, drink, cycle, carry, washed, minimised, proceed, avoided, move, pass, submit, mix, immersed, conduct, stop, make, interact, kept, used, download, call, dry, conducted, invite, carried, remind, read, speak, stored, try, making, implement, checked
Generic actions	follow, adhere, following, comply, adhered, observe, followed

[a]Occurs as non-performative, e.g., *young carers can also request a young carer's needs assessment.*

[b]Occurs as non-performative, e.g., *you should ask your friends or relatives*

candidate forms functioned within the wider context of the document, e.g. whether they occurred in bulleted lists or headings.

While both initial typologies included the same categories, the corpus-based typology identified a narrower range of forms within each category. We attributed this to the saturation threshold for the concordance analysis. Expanding the concordance analysis to all instances of each action verb matched and extended the phraseological variance of the manual typology and led to the identification of an additional category. The only forms captured by the manual analysis but not the corpus-based process were rare instances where the action verb was implicit, e.g. "no holidays" or "hands, face, space". This suggested that the sample of action verbs selected for concordancing based on the keyword analysis was sufficient.

Findings

An analysis of the uses of the key lexical verbs used to express directed actions (Table 2) based on their co-text resulted in a five-category typology of directives (Table 3), integrating directive strategies identified in spoken and written discourse. The lexical verbs loosely corresponded to Hyland's (2002) categories of physical, cognitive and textual acts. Physical verbs referred to the physical actions readers were being asked to perform, e.g., *self-isolate, travelling*, including elements of verb-verb and verb-noun collocations, e.g., (*get*) *tested*, *maintain* (*social distancing*). Cognitive verbs expressed some form of cognitive act e.g. thinking (consider), remembering (*remember*) or the assumption of responsibility (*ensure, help*). In addition, as shown in Table 2, there were also lexical verbs that collocated with noun phrases referring to generic actions, e.g., *follow* + *guidance*.

The first of the directive categories were imperatives. These are the most prototypical form of directives, given that their grammatical form corresponds directly to their illocutionary force. Their prominence here stands out from previous research. Imperatives are rare in English conversational data. In Zinken & Ogiermann's (2013) collection of requests for objects uttered in British families, for instance, a context defined by low social distance and low imposition, only 2% of the requests took the form of an imperative. Imperatives also do not normally appear in legal texts. Trosborg's (1995) study of directives in contract law did not identify a single occurrence of an imperative.

Secondly, in common with studies of legal discourse (e.g., Trosborg, 1995; Gotti, 2014; Diani, 2019), which identify uses of modals, primarily *shall, must* and *may* in directives expressing obligation, permission and prohibition, deontic modality was a central strategy. In our dataset, these included a wider dispersion of modal verbs, semi-modals and periphrastic modals (see 4.2).

Our third category of question directives was based on the common occurrence of action verbs in the interrogative. Interrogative directive forms are very common in spoken English. They constitute the highly diverse category of conventionally indirect requests, typically expressed through structures like *Can you X*, *Do you mind X* or *How about X*, and many others. These forms cannot be found in legal texts and are unlikely to function as conventionally indirect directives in guidance. Ervin-

Table 3 Categories of directives

Category	Category definition	Examples
1. Imperatives	Physical imperatives Cognitive imperatives Textual imperatives	Keep your distance from people outside your household. Ensure you maintain social distancing Please see the latest face covering guidance.
2. Deontic modality	Modal auxiliary: *should, must*, *may*, *can, shall* and *could* Semi and paraphrastic modals: *have to, need to, allowed*, *permitted, prohibited*	You should continue to work *from home* if you can. From 6 January, during the national lockdown people are permitted to leave their homes to attend a funeral.
3. Question directives	Interrogative mood with first/second person pronoun	Can you walk or cycle to your destination? Have I checked the latest travel advice from my transport operator?
4. Performative verbs	Active and passive uses of verbs, including *suggest, advise, recommend, ask, require, urge*	We advise that you limit your social interaction in these venues to your own household and up to one other, wherever possible. We strongly encourage you and your child to take part to help us break chains of transmission and manage the virus.
5. Predicative adjectives		
Evaluative	*vital, critical, beneficial, useful, helpful, OK*	It may be beneficial to discuss the risk assessment with worshippers.
Deontic	*illegal, mandatory, permissible*	It is illegal to travel abroad without a reasonable excuse

Tripp's (1976) category of question directives, a label we have borrowed to refer to the interrogative directives in our data, in contrast, refers to non-conventionally indirect directives, such as 'Is Sybil there?' intended as a request to see or speak to Sybil. According to Ervin-Tripp, question directives name "some condition which would make compliance impossible" (Ervin-Tripp, 1976: 38). From a sequential point of view, these off-record strategies can also be viewed as pre-requests, often treated as requests proper in conversation. As discussed in 4.3, interrogative forms took on unique functions, either introducing directives or as carriers of directive force.

Our fourth category of performatives are central to speech act theory. They were the verbs initially singled out as performing an action rather than describing something. Unlike other directives, performative forms have the advantage of explicitly stating "what precise action it is that is being performed" (Austin, 1962: 61), e.g.,

with the verb clearly naming the directive as a request, advice or an order. Yet, performative directives are rare in everyday communication, and they are not typically found in legal texts. While Trosborg (1995) identified performative verbs such as 'enact' and 'repeal', there were no directives "involving the performative verbs of ordering *(order, command, request,* etc.)" in her data (1995: 41). Directives, such as "we are asking you to stay away" did, however, occur in the public briefings examined by Vincent et al., (2023: 6), who refer to them as performatives. While one could argue that the use of the continuous aspect encourages a representative rather than a directive reading, such forms have been previously classified as explicit performatives (e.g., Blum-Kulka et al., 1989). In fact, in our data, most performative verb forms appeared in the passive voice rather than in the first person singular present indicative active form which Austin (1962: 56) referred to as "classic examples of performatives" (see 4.4.).

A final category consisted of predicative adjectives. These do not feature in typologies of directives derived from spoken discourse but have been identified as carriers of directive force in academic writing (Hyland, 2002) and statements by national leaders during the pandemic (Vincent et al., 2023). The above strategies often find novel applications here, relative to the communicative context of regulating behaviour as a dimension of population level health messaging.

Imperatives

Despite being regarded as the most direct form of directives (Brown & Levinson, 1987; Blum-Kulka et al., 1989), as shown in Table 4, imperative forms were more common for verbs denoting physical actions that the government would not normally interfere with, such as "Wash your hands for at least 20 seconds". Over half the occurrences of *wash* (483/910) and just over a third of the occurrences of *avoid* (463/1,349) took the imperative in comparison to only 2.3% (41/1,773) of occurrences of *self-isolate*, an action that requires a higher level of authority.

Imperatives were used both to express obligation to perform actions and to prohibit specific actions. There was a tendency for imperatives to cluster within a hierarchical discourse pattern involving a central message—e.g., Keep safe while travelling—followed by further directives in the imperative prescribing subordinate actions entailed by the indexed situation:

Table 4 Percentage of high keyness verbs encoding as imperatives

Verb[a]	n	N	%
wash	493	910	54.2
avoid	463	1,349	34.3
follow	248	2,243	11.1
stay	188	1,894	9.9
minimise	60	700	8.6
take	121	3,310	3.7
wear	38	1,313	2.9
self-isolate	41	1,773	2.3
travel	9	3,929	0.2
attend	0	1,093	0.0

[a]Listed in order of keyness

1. Help keep yourself, other passengers and transport staff safe by taking the following precautions:
2. Ensure you maintain social distancing, where possible, including at busy entrances, exits, under canopies, bus stops, platforms or outside of stations
3. Limit the number of people that you come into contact with, for example avoid travelling during peak hours

As is already evident from the above uses of imperative forms such as 'ensure you maintain', physical action verbs occurred as the complement of cognitive verbs. This was a common pattern across all directive categories, e.g. 96.3% (369/383) of the occurrences of *try* took a physical verb complement. Additionally, as shown in Table 5, cognitive verbs—particularly *consider, try* and *remember*—tended to occur as imperatives and/or take a physical action verb as complement.

When taking a physical action verb compliment, cognitive verbs anticipated perceived self-efficacy limitations on the part of the reader in carrying out the physical action (4), highlighted the actions as important, but also optional (5) or served as cognitive prompts, positioning the directed action as having been previously communicated (6):

4. Try to eat healthy, well-balanced meals, drink enough water, exercise regularly, and try to avoid smoking, alcohol and drugs.
5. Consider making a list of items to take with you.
6. If you are using your own utensils, remember to use a separate tea towel for drying

Regardless of what they expressed, these verbs had a mitigating effect, reducing the illocutionary force of the directive. This effect could also be observed for imperatives with a subordinate clause containing other directive forms, e.g. deontic modals:

7. Remember that volunteers should not enter your home, unless it is absolutely necessary.

Another group of imperatives with a relatively weak illocutionary force consisted of verbs such as *refer*:

8. For exemptions in different parts of the UK please refer to the specific guidance for Northern Ireland, Scotland and Wales.

Table 5 Colligational patterns for base form cognitive verbs

	N	Imperative use		+ physical verb complement	
		n	%	n	%
ensure	1,546	44	2.8	109	7.1
consider	1,061	184	17.3	337	31.8
try	383	215	56.1	369	96.3
remember	134	96	71.6	46	34.3

Table 6 Imperative verb collocates of *please*

Collocate	n	MI2
refer	126	16.9
see	123	14.5
note	31	14.1
visit	39	11.8
consult	21	13.6
email	20	11.9
contact	37	9.5
tell	15	11.4
follow	24	9.0
complete	15	9.5

Table 7 Modal, semi-modal and paraphrastic deontic forms

Modal form	N	Norm
should (n't/not)	11,882	9,796.0
can/cannot	9,466	7,803.0
may (not)	3,875	3,194.3
must (not)	3,415	2,815.1
(not) *need (s) to*	3,283	2,706.3
could (n't/not)	811	668.5
(not) *permitted*	802	661.1
(not*) have/has to*	510	420.4
(not) *allowed*	358	295.1
shall	32	26.4
prohibited	31	25.6

These imperative forms guide readers to a textual act (Hyland, 2002)—in most cases a reference to an external source of information. As illustrated in Table 6, textual imperatives were traceable through their tendency to collocate with the politeness marker *please.*

Despite being among the strongest collocates of *please*, *see* was not identified in the keyword analysis as unusually frequent, potentially reflecting its formulaic use as a textual directive in British writing generally. By this reasoning, textual imperatives were a feature of informational writing in so far as they constructed a relationship between writer and reader that is external or subordinate to the relationship that holds for the topic of writing and specific to the role of the reader as information seeker and of the writer as information provider. In contrast, imperatives that depicted physical actions in our corpus invoked a relationship between the state and its citizens.

Deontic Modality

In our corpus, deontic modal forms were frequent (Table 7). These forms typically collocated with the lexical verbs referring to physical actions (e.g. *wear*), cognitive actions (*ensure*), and generic actions (*follow*). Deontic forms expressed obligation (*should, must, could, shall*), prohibition (*should, can, must* with negative polarity) and permission (*can, may*). Of these forms, *should* and *must* were the most strongly predictive of directive use. In a randomized sample of 200 concordance lines, *should*

Table 8 Active verb collocates of *should* and *must*

should	MI2	n	*Must*	MI2	n
follow	13.1	982	*isolate*	12.2	349
continue	11.7	545	*wear*	12.0	274
ensure	11.6	477	*follow*	11.1	260
take	11.2	612	*take*	10.2	232
consider	11.1	336	*remain*	10.3	122
avoid	11.0	362	*mingle*	11.5	53
wash	10.3	237	*stay*	10.0	165
try	10.2	147	*adhere*	10.5	66
attend	9.8	220	*observe*	10.4	46
stay	9.8	288	*leave*	9.7	103

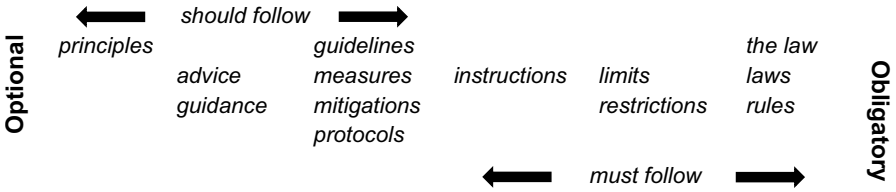


Fig. 1 *must/should follow* + collective noun [rules]

and *must* expressed directive force in 98.5% (197/200) and 96.5% (193/200) of cases respectively. Other forms were weak predictors, e.g. *could* primarily had an epistemic function. Additionally, we identified deontic uses of the semi-modal *have to* alongside paraphrastic forms, including *need (to), allowed, permitted* and *prohibited*. The greater variety of deontic forms we identified in comparison to studies of directives in legal texts potentially relates to the hybridity of the texts constituting guidance, which incorporated elements of legal genres in their representations of emergency legislation, alongside health messaging and science communication.

The comparison of *should* and *must* with the BNC Written 2014 indicated they were significantly more frequent, with large effect sizes for both (Log ratio =3.56 and 2.73 respectively). This difference between the frequency of *should* and *must* is unusual, e.g. with *should* around 12 times more frequent compared with around 7 times for *must*. In legal genres, in contrast, *should* rarely occurs, with *must* and *shall* by far the most frequently occurring deontic modals (Biel, 2014; Garzone, 2013).

An analysis of the most common active verb collocates of *should* and *must* (Table 8) suggested the forcefulness of the directive was dependent on whether the lexical verb expressed a legislated or unlegislated action. There was a tendency for *should* to collocate with verbs expressing cognitive actions (*ensure*, *consider*) or unlegislated physical actions, e.g. handwashing (*wash*). There was, thus, a degree of overlap between the lexical verbs occurring with *should* and those that occurred in the imperative (see Section "Imperatives"). In contrast, *must* mainly occurred with verbs expressing legislated physical actions, e.g. self-isolation (*isolate*), mask wearing (*wear*), social distancing (*not + mingle)*, or strongly obligated generic actions (*adhere*). Similarly, while the verb *follow* is a strong collocate of both *must* and *should*, as illustrated in Fig. 1, *must follow* tended to occur with collective nouns referring to

rules that expressed greater levels of imposition (e.g. *laws*) in comparison to *should follow* (e.g. *guidance*). There was also a higher tendency for second person pronoun use with *must* than *should*. The cluster *you must* makes up 43% (1,498/3,415) of all occurrences of *must*. In comparison, *you should* only occurs 28.7% (3,413/11,882) of the time. While it is ambiguous as to whether *you* in Example 9 refers to an individual or functions as a collective pronoun, such uses stand out from e.g., third person uses, as in Example 10, as being a more direct form of reader address:

9. In general, you must not meet with another person socially or undertake any social or recreational activities with another person in Tier 4 areas.
10. People should not wash the body parts of others.

Vincent et al. (2023) suggest there was an awareness amongst national leaders to temper the forcefulness of forms like *must* when expressing COVID related directives to the public, by using *we must*. The reverse tendency was true for the use of *must* in our data, which occurred in verb phrases depicting impositional actions and with more direct forms of address. Thus, while here there is a consistent pattern for more impositional actions, less impositional actions, such as handwashing, were communicated with directive forms that expressed different levels of force, e.g. the imperative and the (comparatively) weaker deontic modal *should.*

Question Directives

We identified interrogative forms that collocated with first and second person pronouns, with those in the first person not necessarily functioning as directives themselves but typically introducing them. In the example below, the construction *Can I X*, rather than asking for permission, is a genuine question seeking clarification about what is permitted.

11. Can I meet people in my home?

People from different households must not meet in a private home or garden.

The directives following such questions either confirm or, as above, negate them. These adjacency pairs are reminiscent of Q and A sequences, such as those found in manuals or instructional materials (Murcia-Bielsa, 2000).

The use of the first person thus functions as a strategy that embeds the voice of the reader actively seeking information, making the text more interactive. While questions in the second person also seem to involve the reader in a form of dialogue, they do function as directives. They typically appear clustered in checklists, for instance in 'Checklists for safer travel', where the following interrogative directives, with and without modal forms, follow:

12. Can you walk or cycle to your destination?
13. Have you planned your journey to minimise crowded areas and allow for delays?
14. Are you taking the most direct route to your destination?

These questions suggest safer options to the reader through the deontic *Can you* or function as reminders of actions that ensure a higher level of safety by asking if something has or is being done by the reader, thus indirectly instructing them to do so.

The question directives found in our data are thus "expressed by means of a vehicle conventionally associated with another class of actions" (Svennevig, 2021: 166), similar to directives occasionally found on Covid-19 public signs, such as 'Thank you for wearing a mask', where an expression of thanking carries directive force (Ogiermann, 2025: 340).

Performatives

As shown in Table 9, we identified performative verbs representing different degrees of illocutionary force, namely: *ask*, *recommend*, *advise*, *encourage*, *require*, *urge*, *suggest,* as well as *expect* which, though not a performative verb, collocated with the same cognitive and physical action verbs.

Performative speech acts normally occur in the first person, simple present tense and active voice and are identifiable via the 'hereby' test (Austin, 1962). The first column in Table 9 represents the cases that approximate Austin's category of performatives (based on the *hereby* test), though, in our data, they only occurred in the plural:

15. We advise you to keep the numbers low.
16. We urge you to continue to seek support from the NHS and other health providers for your existing health conditions and any new health concerns.

Such cases were rare, i.e., only 21 of the 556 directives formulated using a form of *advise* were "classic examples of performatives" (Austin, 1962: 56). Further, non-prototypical uses of performatives (column 2 in Table 9) included occurrences of performative verbs in the active voice with a third person subject, typically the *government*, a metonym for individuals in government issuing the advice:

Table 9 Directives with performative verbs

Lemma	Prototypical Performative	Non-prototypical Performative[a]		N
	We + performative verb + *you* + physical action verb	Active	Passive	
advise	21	129	406	556
require	0	0	347	347
encourage	22	56	154	232
recommend	48	76	72	196
ask	1	23	84	108
expect	0	0	80	80
urge	13	12	0	25
suggest	21	1	0	22

[a]Non-prototypical performatives subsume all uses of verbs that state the action that is being performed but are a poor fit for Austin's "classic examples of performatives" (Austin, 1962: 56), e.g. due to the concealment of the directing agent.

Subject	Auxiliary	Performative	Action/measure
Actor, e.g. *You*; *Your employer*	is/are could/may/will be	*required* *advised* *encouraged* *recommended* *expected*	to wear a face covering
It	is		that the number of attendees be restricted
Action/measure, e.g. *PPE*; *regular cleaning*	is/are could/may/will be		***

Fig. 2 Passive constructions involving performative verbs

It is/will/may be (Remember) it is You/many people may find it	adjective	(for…) to do/ you do that + finite clause [action]

Fig. 3 Linguistic realisations of predicative adjectives

17. The government strongly advises each place of worship ensures that visitors follow social [distancing …]

Such examples point to a similar agent behind the pronoun *we* in prototypical performative uses. Most non-prototypical performatives occurred in the passive voice, which introduced yet more variation:

18. You may be asked to show these details to immigration officers when you arrive.
19. Wearing face coverings is recommended for both medics and patients, where this is possible.
20. It is advised that the number of attendees should be restricted to a maximum of 30 persons for public health reasons.

The use of the passive voice in directives is a frequent phenomenon in legal texts "foregrounding a non-human object of legislation" (Trosborg, 1995: 44), as in Example 19. The passive constructions themselves, while always supressing the agent, also show variation in how they refer to the person or body to whom the directive is addressed, as summarised in Figure 2.

The verbs considered here were thus not only introduced by first and third person subjects, but also collocated with *you*, directly addressing the reader, as well as more specific addressees in the third person (e.g. *carers, extremely clinically vulnerable people, all businesses*). These examples suggest that performative verbs expressed directives addressed by the government (or government agent) to both a general reader and specific addressees.

Predicative Adjectives

In our corpus, a range of adjectives collocated with lexical verbs expressing preventive actions, occurring in an adverbial finite or non-finite clause following the adjective (Fig. 3).

A number of these adjectives were evaluative, expressing the writer's stance towards propositional content (Swales & Burke, 2003). These expressed judgements about the proposition's importance (*important, essential, vital, crucial*), acceptability (*ok/not ok*) or its potential desirability (*beneficial, useful, helpful, advisable*). When occurring with a verb expressing a physical, generic or cognitive action, illocutionary force could be inferred as a moral imperative to act (as in example 21), but not when the verb did not express a preventive action (as in 22):

21. It is important to wash or sanitise your hands before and after touching your face covering.
22. It is important to underline that schools, all childcare settings… …remain safe places for children.

These adjectives were gradable in the sense that the evaluative strength of the adjective (e.g. *important* vs. *beneficial*) expressed different degrees of illocutionary force. Their different gradability showed different collocational preferences. For instance, adjectives such as *important* and *essential* tended to collocate with verbs expressing actions that were legally prescribed (e.g. self-isolation and mask wearing) or which formed central health messages (e.g. handwashing), whereas *beneficial* and *helpful* collocated with advisory actions, e.g. being aware of guidance and obtaining information. Other adjectives—*illegal, mandatory* and *permissible*—were non-axiological and non-gradable, expressing obligation, prohibition or permission without commitment on the part of the writer to the desirability of the proposition they related to. Such adjectives only collocated with verbs expressing actions that were legally regulated, e.g. leaving home, social mixing and school attendance, introducing a legal rather than a moral obligation. Noun phrases containing terms belonging to the same semantic set performed a similar function, e.g. "it is a legal requirement to wear a face covering on public transport". All uses of predicative adjectives were pragmatically ambiguous in the sense they were representatives that fulfilled a directive function.

Discussion and Conclusion

The present paper has examined the use of directives in a corpus of texts mediating preventive actions in the setting of the Covid-19 pandemic. Based on this analysis, guidance represents a mixed genre combining features of legal texts, health messaging and risk communication. The directives identified in our study differed considerably from those included in existing classifications of directive speech acts (Aijmer, 1996; Blum-Kulka et al., 1989; Ervin-Tripp, 1976). Firstly, predicative adjectives have not been previously discussed as a directive form in the bulk of pragmatic the-

ory and research, e.g. in spoken English or as a feature of legal discourse (Diani, 2019; Trosborg, 1995). However, they have been identified in published academic articles, textbooks and student essays (Hyland, 2002) and public risk communication briefings (Vincent et al., 2023),

Secondly, strategies from typologies based on spoken discourse found new applications in our corpus. Interrogative forms were used differently from how they have become conventionalized in everyday conversations, their main feature being a form of interactivity that they bring to what is being communicated asynchronously. The questions used in guidance texts either served as strategies intended to consider safer options (i.e., suggestions) or as first pair parts in question-answer sequences, where the second pair parts directed readers towards protective behaviours.

Imperatives, generally viewed as reflecting urgency and a power differential (Brown & Levinson, 1987), tended to be used when directing readers towards low imposition actions, such as washing hands or, with the politeness marker *please*, constructing a textual relationship between writer and reader external to that constructed by directive forms used with action verbs. These tendencies suggest an epistemic authority rather than one derived from a power differential—readers are guided to actions that are in their own interest from a position of superior knowledge, whether related to protective action or to information seeking.

Finally, guidance texts integrated directive strategies found in both spoken and legal discourse in novel ways. We found various performative verbs, ranging from *urge* to *suggest*, which—similar to predicative adjective constructions—expressed different degrees of illocutionary force. In most cases, however, these verbs appeared in the passive voice, resembling legal writing, which typically involves "agent suppression" and "the use of non-human subject" (Trosborg, 1995, p. 47). In legal texts, which heavily rely on deontic modality, "depersonalization" is viewed as a "way of mitigating the impact of a directive on the addressee" (Trosborg, 1995, p. 52). While our data included a high proportion of passive constructions, involving both performative and deontic verbs, the latter were more varied than they typically are in legal texts—and much more prominent than they are in spoken conversations, where constructions such as *you must* / *should* are avoided, with preference given to less direct formulations.

The context for the study presented a good testing ground for established corpus-based techniques in the study of directives. Keyword analysis proved an effective sampling approach. The tendency for recycled language in the context of communicating preventive actions across multiple settings and time frames meant that verbs used to refer to advised actions featured prominently on the generated keyword list. The iterative process of categorising keywords and the examination of their co-texts detected forms that were highly predictive of directive use, e.g., deontic modals like *must*, though the tally of some forms required extensive manual analysis, e.g., identifying imperatives by isolating base verb forms.

The remarkable variety of directive forms used in guidance can be attributed to contextual factors—most notably the tension between the need to promote and the need to impose and enforce protective actions in response to the emerging threat posed by COVID-19. As the government in a democratic society is both accountable to the general public and empowered to prescribe and enforce law, the face threat

posed by directives in guidance is highly sensitive to individual contexts. When a threat is experienced, informational campaigns, such as health advice and messaging, form part of a feedback loop for public decision making, as new informational cues prompt information seeking and protective action (Lindell & Perry, 2012). At one extreme, such campaigns seek to avoid the appearance of state imposition, e.g., to ward off the "rhetorical cudgel" of the "nanny state" (Kersh, 2015, p.1083). At the other, while time-bounded and limited by the purposes of their imposition, during the pandemic, there were protocols prescribing protective actions as mandatory and legally enforced (Cormacain, 2020). Within some categories, graduations in force seemed to have some basis in whether the prescribed action had a legislative basis, when more forceful forms were used. In contrast to the directives used by national leaders (Vincent et al., 2023), these were often untempered, as illustrated by the frequent collocation of *you must* and verbs denoting impositional actions with a legal basis. However, directive forms and action verbs were often used interchangeably, requiring the reader to infer whether something was being legally prescribed or merely suggested.

In summary, the communication of preventive actions in our corpus was complicated and potentially confounded by the eclectic use of directives, especially the inconsistencies in their illocutionary force and the pragmatic ambiguity inherent in the use of certain forms affecting their inferential path, for instance in the case of predicative adjectives. Of course, without further empirical work, it is difficult to assess whether and how different forms were interpreted as directives. Considering the myriad ways in which linguistic forms can interact with capacities and proclivities for interpretation (Tang, 2022), the implications for health communication are profound. Our study has thus provided insights into the use of directives in the novel context of implementing and legislating containment measures at population level, as well as into the affordances and limitations of corpus methodology for their study. Future research could usefully focus on identifying relationships between the use of directives and willingness to take up protective actions, particularly the influence of combinations of weaker and stronger forms, including how these relationships vary across cultural groups and for different risk scenarios, e.g., when there is an emergency footing, such as during a pandemic, compared with targeted campaigns for long term conditions.

Author Contribution CT supervised corpus compilation and led the corpus analysis, wrote paper EO supervised data collection, developed typology based on manual analysis, wrote paper EE conducted the keyword analysis and developed an initial corpus based typology

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Declarations

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