The imperative speech act of command in German Sign Language (DGS)

Marianthi Koraka, Thomas Finkbeiner, Markus Steinbach, Nina-Kristin Meister
University of Göttingen

Introduction: In this paper we investigate the imperative speech act of command in German Sign Language (DGS) by analyzing the spectrum of possible morphosyntactic and pragmatic markers based on an empirical study. Commands are a typical directive construction in which a *Speaker* or *Signer* requires an *Addressee* to carry out the content expressed in the proposition and in most spoken languages, they are typically realized with an imperative sentence type (cf. Aikhenvald 2010). Imperatives as a sentence type can be distinguished from declaratives and interrogatives on the basis of their morphosyntax (such as deprived verbal morphology and no overt subjects in most languages). Functionally, in addition to commands, the imperative sentence type can express other speech acts such as requests, advices, and permissions among others (cf. König & Siemund 2007; Condoravdi & Lauer 2012). Regarding imperatives in sign languages, manual and non-manual markers (NMMs) seem to be important. For some sign languages (e.g., LIS, LSF) it has been shown that imperatives are marked manually with particular signs, such as the MOVIMP sign (cf. Donati et al. 2017). In addition, imperatives are marked with prosodic cues (cf. Donati et al. 2017 for LIS, LSF, LSC; Brentari et al. 2018 for ASL; Bross 2020 for DGS), like for instance sign and hold duration (e.g., in ASL commands the sign duration is shorter compared to neutral sentences and other imperative speech acts, such explanation, permission and advice (cf. Brentari et al. 2018)) as well as with particular NMMs (e.g., furrowed brows mark commands in LSC (cf. Donati et al. 2017)). Syntactically, imperatives in sign languages exhibit some common properties with imperatives in spoken languages, like for instance subject omission (cf. Donati et al. 2017; Brentari et al. 2018).

Method: For the data collection, a *Picture and Sign Task* was designed. Twenty DGS verbs of different categories (valency (intransitive, transitive, ditransitive), uninflected (neutral and body-anchored), agreement (regular, backward, spatial)) were recorded with a native DGS signer (one of the authors of this paper). Five other native signers of DGS (2 women, 3 men) participated in the study. They were presented with a video via Power Point, which provided information regarding situations where commands are typically used (e.g., workplace) and the interlocutors typically involved (e.g., boss and employee). Subsequently, all verbs were presented (some of the verbs together with pictures that corresponded to the verb's arguments). Participants were then asked to produce twenty short commands directed to the deaf person who was sitting opposed to them by using the respective verb appearing on the screen or by combining the verb on the screen with the picture(s). Their productions were recorded and annotated with ELAN. All constructions were checked with a native signer, who decided which sentences are clearly commands that could be used for the analysis (56 out of 100 signed sentences in the command condition). The non-manuals were evaluated in accordance with the Facial Action Coding System (Ekman et al. 2002; see Pendzich 2020 for the analysis of non-manuals in sign languages with FACS). Neutral sentences (simple assertions) and additional imperative speech acts, such as advice, permission, warning and request were also collected using the same method in order to be later compared with the commands.

Results: Concerning word order, no differences are observed between neutral sentences and commands within our data, since in both cases the object(s) precede(s) the verb following the basic OV order of DGS (see Proske 2022 for the word order of declarative sentences in DGS). Another interesting finding concerns the sign YOU in commands, which can appear in the sentence initial position with a prosodic break between YOU and the rest of the sentence. Furthermore, we found the following two markers for commands in DGS. The first one is glossed as MOVIMP (in 20/56 cases, following the glossing of Donati et al. 2017) and the second one is the PALM-UP

gesture (PU) (in 22/56 cases). These two markers have been found in other sign languages for the expression of commands and related imperative speech acts as well. MOVIMP is signed with an index-handshape and a movement resulting from a rotation of the wrist. The sign seems to be combined only with second person pronoun. It seems to appear mainly preverbally and can occur with the sentence final main verb GO (see 1). Of note is that there was one case in our data on commands in which MOVIMP is used as the main verb of the command instead of the verb GO (see 2). As for the PU gesture, it appears always in the end of the commands (see 3). Another possible manual marker for commands seems to be the sign NOW, which appears in 17/56 commands (see 2).

		br									
	hm	hm				hbf			bl, hbf	
(1)	MOVIMP BANK GO			(2)	YOU NOW BANK MOVIMP			(3)	WORK PU	

Commands in DGS can also be marked solely non-manually by using particular combinations of NMMs. Brow raise (br) and brow lowerer (bl) seem to be the most prominent markers in the upper face within commands. Another NMM that we found in almost all commands is an intensified forth to backward head movement (hm), which appears also in neutral sentences in much less intensity. Moreover, in almost all elicited commands the signers tend to lean their head and/or body forward (hbf) as opposed to the neutral sentences. Finally, all verbs are articulated more accentuated in commands than in neutral sentences.

Discussion: Our data suggest that DGS uses a particular non-declarative construction for the expression of commands. This construction resembles imperative sentence types described for spoken languages. In addition, it can be marked with specific manual elements like the MOVIMP sign, which is highly context dependent. The sign NOW could be analyzed as an additional manual marker of commands that indicates the urgency for the addressee to carry out the action expressed by the imperative sentence. The prosodic break between the sign YOU and the rest of the sentence indicates that the second person pronoun is a vocative rather than a true subject of the sentence. Similar observations have been made for spoken languages (cf. Han 1998) and other sign languages (cf. Donati et al. 2017). Note that a crucial point of our study in contrast to previous ones is that the elicitation of different imperative speech acts and neutral sentences follows the same method including the same stimuli in different contexts. This is decisive, since it helps us to specify the essential role of NMMs and manual markers in the expression of sentence types and speech acts in DGS. Based on the data so far, we argue that DGS has a designated imperative sentence type used to express commands. However, it is not clear yet whether in DGS this imperative sentence type can be used to express other imperative speech acts or whether smaller sentence type distinctions are involved, which correspond to specific imperative speech acts. The analysis of other imperative speech acts elicited in our study will help us answer these questions.

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