Give signs – make happy

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Abstract

The transfer verb "give" has been shown to be subject to metaphorical extension and—in a second step—grammaticalization in many unrelated languages. As for the former process, we observe extension to abstract transfer (e.g., "give responsibility/pleasure"); as for the latter, "give" may grammaticalize into, for instance, a benefactive or causative marker (e.g., Kuteva et al. 2019). The mechanisms underlying these diachronic changes appear to be modality-independent, as similar processes have been identified in various sign languages.

In the present study, we offer the first comprehensive overview of various uses of "give" in a single sign language, Sign Language of the Netherlands (NGT), based entirely on naturalistic corpus data. A search of the Corpus NGT yielded 131 tokens of GEVEN ("give"). Analysis of these tokens reveals that less than a third of them actually express concrete transfer, while the remaining tokens express abstract transfer of various types (e.g., "give chance," "give name"),

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including grammatical meanings like change of state/causation (e.g., "give happy"). We discuss our findings from a crossmodal and intramodal typological perspective, offering also speculations about a possible grammaticalization path.

Introduction

Humans are a social species, and social interactions—be they within families or within or across communities—commonly involve acts of *giving*, whereby an item is transferred from one individual to another. Alongside other forms of social interaction, the exchange of goods, and the negotiations commonly associated with this interaction, actually may have played a pivotal role in the evolution of communication and language (Dor, Knight, and Lewis 2014; Pleyer 2023). It should therefore come as no surprise that a "give" verb is part of the core vocabulary of most languages and is a word that is learned early during first language acquisition (Newman 1996). This makes it an interesting study object for typologists.

Beyond its concrete use, the transfer verb "give" has been shown to surface with more abstract and grammatical meanings in many unrelated languages, including a small number of sign languages. In this article, we offer the first comprehensive overview of various uses of "give" in a single sign language, Sign Language of the Netherlands (NGT), based entirely on naturalistic corpus data. In the remainder of the introduction, we will provide background information on acts of giving and on certain aspects of sign language structure. In the next section, we then illustrate by means of examples from both spoken and signed languages metaphorical extensions and grammatical uses of "give" verbs. This is followed by a description of our method. Subsequently, we present our results and relate the uses of GIVE in the Corpus NGT to the patterns described in the theoretical background. In the discussion, we put our NGT data in a crosslinguistic perspective, and we offer some speculations on the grammaticalization of GIVE.

Acts of Giving (and Receiving)

"Give" may well be a basic part of a language's vocabulary, yet the concept of "giving" is layered and rather complex: It involves the person who is the GIVER, the person who is the RECIPIENT, the THING[1] that is being transferred, the transfer action, and the path

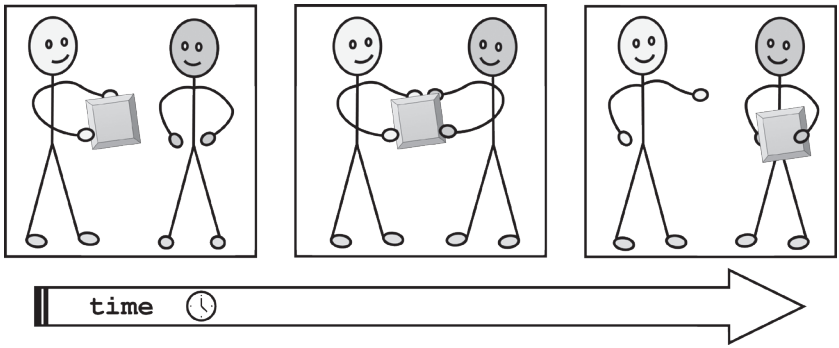

FIGURE 1. Illustration of a prototypical giving event: transfer of an object (THING) from (the hand[s] of) one person (GIVER) to (the hand[s] of) another person (RECIPIENT).

along which the THING moves (typically with the GIVER as starting point and the RECIPIENT as end point; see figure 1). Additionally, it is often implied that the given THING is *for* someone or that it is being given for some reason. As we shall see, all these semantic components may serve as a starting point for grammaticalization.

While the argument structure of "give" verbs appears to be stable across languages, there is quite some typological variation in how individual languages grammatically encode giving events. English employs word order for indicating the grammatical roles of subject, indirect object, and direct object (example 1a)—although an alternative order is available if the RECIPIENT is introduced by a preposition (*The girl gave a book to the teacher*). In the Russian example 1b, the word order is the same as in example 1a, but the objects are case-marked, and consequently, the word order in Russian is flexible.

EXAMPLE 1.

a. *The girl **gave** the teacher a book.* [English]
b. *Devushka **dala** uchitel-yu knig-u.* [Russian]
girl gave teacher-DAT book-ACC
"The girl gave the teacher a book."
c. *Aningaasa-t Niisi-mut **tunni**-up-pai.*
money-PL Niisi-ALL give:3SG.SUBJ:3PL.OBJ-SUF-IND
"He gave the money to Niisi."
[West Greenlandic; Fortescue 1984, in Newman 1996, 71]

In yet other languages, (some of) the arguments can be marked on the verb, sometimes in combination with case markers on the arguments, as is the case in West Greenlandic example 1c; ALL = allative case. In this particular case, *tunni* is a portmanteau morpheme that expresses the meaning of giving as well as agreement with the subject and the direct object. As we are going to see in the next section, a similar pattern has been described for many sign languages, where arguments can also be marked on certain verbs, including the verb GIVE.

A concept that is semantically closely related to "give" is "receive," as the latter also expresses transfer of a THING from a GIVER to a RECIPIENT. Essentially, the clause *I received a book from Sue* expresses an event that is semantically very similar to *Sue gave me a book*, in that the THING is transferred from a source to a goal location. "Receive," however, puts focus on the RECIPIENT; a GIVER is always implied, but can be left out (e.g., *from Sue* in the above example). As "receive"-type verbs use the same semantic framework as "give"-type verbs (Newman 1996), they can be semantically extended and grammaticalized in similar ways, as we shall see below.[2]

Relevant Aspects of Sign Language Grammar

For the purpose of our study, we need to introduce a few aspects of sign language grammar, specifically the spatial modulation of certain verbs and the use of a particular type of nonmanual marker (NMM).

Most sign languages that have been studied to date use the signing space in front of the signer's body to keep track of discourse referents in more or less conventionalized ways (e.g., Engberg-Pedersen 1993; Meir 2002; Ferrara et al. 2022). A discourse referent can be present in the discourse context (e.g., a conversation partner or an entity close by), allowing the signer to use a real-life location as a reference point. If a discourse referent is not present, then it can, in many sign languages, be associated with an arbitrary locus in space (referred to as "referential locus" or "R-locus"), usually by means of a pointing sign. Once introduced, such arbitrary loci can be used pronominally by pointing to the respective locus. This strategy is illustrated in example 2a from Danish Sign Language (DTS), where the first pointing

sign (INDEX) localizes the nonpresent referent BOY at locus 3a, and the second pointing sign localizes the location SCHOOL at locus 3b. In the second clause, locus 3a is then targeted again by an INDEX to anaphorically refer back to the boy.[3] Of relevance in the present context is the fact that the same loci can also be employed on certain verbs to mark one or two of their arguments (so-called "agreeing" or "indicating" verbs; Padden 1988; Liddell 2003). This is achieved by spatially modulating the verb, prototypically in such a way that the verb's movement proceeds from the locus associated with the subject (the source) to the locus associated with the (in)direct object (the goal). We can observe this in the second clause of example 2a, where the agreeing verb SEND is articulated with its movement trajectory proceeding from locus 3a to locus 3b, thus expressing that the boy sent a letter to the school. Crucially, not all verbs can be spatially modified in this way; rather, many verbs, so-called "plain verbs," have a fixed form.[4]

EXAMPLE 2.

a. INDEX_{3a} BOY WANT VISIT INDEX_{3b} SCHOOL, INDEX_{3a} LETTER $_{3a}\text{SEND}_{3b}$
"The boy wanted to visit the school, so he sent them a letter."
[DTS; Ordbog over Dansk Tegnsprog 2023]

b. YESTERDAY POSS_1 COLLEAGUE INDEX_{3a} FLOWER $_{3a}$**GIVE**$(\text{})_1$.
"Yesterday, my colleague gave me a flower."
[German Sign Language (DGS)]

Being a prototypical transfer verb, GIVE makes for a good candidate for an agreeing verb, and indeed, in most sign languages studied to date, GIVE can be spatially modified. In the case of GIVE, the movement proceeds from the locus of the subject/source (the GIVER) to the locus of the indirect object/goal (the RECIPIENT). In the German Sign Language (DGS) example 2b, the verb moves from locus 3a toward the signer, thus expressing third-person subject and first-person object agreement. What is special about the transfer verb GIVE is that its handshape can also be modified to mark one of its arguments, viz. the direct object—such morphological handshapes are commonly referred to as "classifier handshapes" (for overviews, see Zwitserlood 2012; Tang, Li, and He 2021). Consequently, in example

2b, the  -handshape is used, which classifies long, thin objects (e.g., a flower, pen, or stick), while for objects with other shape properties, different handshapes would be selected (e.g.,  -handshape for a book,  -handshape for a cup).

Another characteristic of sign languages we need to introduce is the use of NMMs. NMMs involve grammatically significant movements or configurations of the body, head, eyebrows, or mouth, and they are capable of conveying phonological, morphological, and syntactic information (Pfau and Quer 2010; Wilbur 2021). Of relevance in the present context are mouthings (i.e., silent articulations of [parts of] spoken words from the surrounding spoken language coarticulated with manual signs). The extent to which a specific sign language uses mouthings varies, but for NGT, it has been shown that mouthings are an integral part of the language (Schermer 1990; Bank 2014). Mouthings may disambiguate meaning, or they may specify or complement the meaning of a manual sign. In example 3a, we offer an example from the Corpus NGT involving the sign GIVE. Here, the mouthing accompanying GIVE in the first clause adds tense information (which is not manually encoded), as *gegeven* is the past participle of the Dutch verb *geven* ("give"), distinguishing this instance of GIVE from the one in the second clause, which is accompanied by present tense /geven/ (in addition, two of the nouns are accompanied by mouthings).[5]

Example 3.

/leven/ /gegeve/ /liefde/ /geven/
a. LIFE CHILD $_1$**GIVE**$_2$, LOVE $_1$**GIVE**$_2$. [NGT; 1734-S71-00:10]
"You have given the child life, you should give it love."

/ krijgen/
b. PLUS GROUP $_2$**GIVE/RECEIVE**$_1$ MUCH SUBSIDIES. [NGT; 128-S07-02:14]
"Besides, this group receives a lot of subsidies."

In the previous section, we already alluded to the fact that "give" and "receive" are semantically very close to each other, the crucial difference being that "receive" puts focus on the RECIPIENT. In fact, in NGT, the same manual form is used to express both meanings,

but "receive"-type meanings can be disambiguated by the mouthing /krijg(en)/ ("receive/get"), as in example 3b. In this case, the GIVER often remains unspecified. Note that in example 3b, the RECIPIENT (GROUP) is specified, but has not been assigned a locus. GIVE/RECEIVE moves here from neutral space toward the signer, who thus takes the place of the RECIPIENT (Engberg-Pedersen 1993; Barberà and Cabredo Hofherr 2017). Given that, at least in the NGT data we are going to discuss, it often cannot be decided whether the manual form is used with a "give"-type or a "receive"-type meaning, we will treat them as one verb for now and gloss them as GIVE. However, we will get back to this issue in the final section in the discussion.

On Giving: Metaphorical Extension and Grammaticalization

As mentioned before, the literal meaning of "give" involves the transfer of a THING from a GIVER to a RECIPIENT. This meaning is clearly expressed in the spoken language examples 1a–1c and the DGS example 2b. The NGT example 3b is a borderline case, as it seems unlikely that the subsidy has been literally handed over to the RECIPIENT—yet, it might have been. In contrast, the NGT example 3a presents us with a clear case of abstract transfer, as the transferred THING is a feeling.

In this section, we will first address various metaphorical extensions of "give," before turning to even more abstract, and thus likely grammaticalized, uses of the verb. In both subsections, we will use examples from spoken and signed languages for illustration. It is important to note that the line between the two domains, metaphorical extension and grammatical use, is not always clear; hence, the inclusion of certain examples in one or the other subsection could likely be debated.

Metaphorical Extension

Speakers frequently (but mostly unconsciously) use concrete, easy-to-visualize entities and actions metaphorically in order to conceptualize and describe more abstract acts or notions (Lakoff and Johnson 1980). In English, for instance, the abstract notion of time is conceptualized

as a line, such that the past is located behind us and the future in front of us (e.g., *to look forward to something*; cf. Woodin and Winter 2018). Similarly, an emotional change of state can be conceptualized as movement (e.g., *to fall in love*).

When it comes to the verb "give," we commonly observe abstractions of the THING, such that the concrete manual manipulation of the THING (as visualized in figure 1) is no longer at stake. In other words: The act of giving is metaphorically extended to an act that involves the transfer of an abstract entity, such that the notion "change of possession" is replaced by the related notion "change of control." Two examples illustrating this extension—one from English, one from Dutch—are given in example 4a and 4b. Another prevalent metaphorical extension of "give," identified by Newman (1996), is observed in the domain of interpersonal communication, where the THING is some sort of message, be it of a more general (e.g., "give information") or a more specific nature, as in the American Sign Language (ASL) example 4c. In this latter example, most of the semantics of literal "give" stay intact; yet, the GIVER does not lose control over the THING but rather shares the control with the RECIPIENT (note that the THING "legacy" is fingerspelled in this example).

Example 4.

a. *Please,* ***give*** *me some more time.* [English]

b. *We moet-en haar nog een kans* ***gev-en***. [Dutch]
we must-PL her another chance give-INF
"We should give her another chance."

c. MOTHER $_{3a}$**GIVE-1**$_{center}$ L-E-G-A-C-Y [fingerspelled].
"Mother gave me a legacy (of sign language, deaf culture, and history)."
[ASL; adapted from Wilcox 1998, 197]

In the examples presented so far, "give" functions as the main verb and combines with a noun-like argument as the THING. Yet, in various metaphorically extended meanings, we find "give" in other kinds of constructions. One such construction, which at first glance looks like a regular verb+noun combination, is the light verb construction (LVC). However, in this type of construction, the "give" verb contributes to the meaning of the phrase to a lesser degree than the nominal part (i.e., the THING), which refers to an event and is often

deverbal (Elenbaas 2013; Nagy, Rácz, and Vincze 2020). An English example is provided in example 5a. Clearly, *to give an answer* has nearly the same semantic content as *to answer* (Caro and Arús-Hita 2020; cf. also *to give a laugh*). In the NGT example 5b, GIVE co-occurs with the noun BLAME, and again, it is the nominal part that contributes the crucial semantics to the phrase (as is also evident from the English translation; AUX.REC is a two-handed reciprocal auxiliary).[6]

EXAMPLE 5.

a. *Could you please **give** me an answer by tomorrow?* [English]
b. [. . .] WE.TWO INDEX$_1$ ALWAYS $_1$**GIVE**$_2$ BLAME AUX.REC.
"[. . .] (that) we always blame each other." [NGT; 369-S20-00:44]

In all examples presented in this section, we thus observe metaphorical extension, which goes hand in hand with a loss of semantic content, as the meanings expressed are further removed from the original meaning of "give," as illustrated in figure 1. What is noteworthy about the sign language examples is that the verb GIVE is iconic, as the hand moves in space as if transferring an object from a source to a goal. This iconic form is maintained in the above sign language examples, although the event no longer involves the manual manipulation and transfer of an object.[7]

Grammatical(ized) Uses

We are now moving on to uses of "give" that are of a more grammatical nature in that "give" appears to be used with a grammatical and/or auxiliary-like function. Such functions emerge when "give" combines with another verb in a serial verb construction (SVC). In an SVC, two lexical verbs sharing one or more arguments co-occur in a single clause. Crucially, no linking element (like a conjunction) is present, and the two verbs thus express a single event, which implies, for instance, that negation, when present, must scope over both verbs (Aikhenvald 2006; Haspelmath 2016; Lovestrand 2021). Similar to what we observed in LVCs, the "give" verb contributes less to the construction semantically than the verb it combines with, but commonly adds a benefactive or causative meaning.

Benefactive uses of "give" are illustrated in example 6. The actions of buying (example 6a) and paying (example 6b) are performed for the benefit of someone, and this beneficiary is introduced by the "give" verb. Note, however, that "give" does not constitute a separate event—there is only a single event in both examples. In example 6b, the tight connection of the two verbs is further evidenced by the fact that the mouthing associated with PAY (*betalen* in Dutch) spreads over GIVE and the intervening pointing sign, thus creating one prosodic unit (Sandler 1999; Bank, Crasborn, and van Hout 2015; Pfau 2016). In Mandarin Chinese, the verb *gěi* ("give") functions as a recipient marker when combined with other directional predicates (e.g., "send") but as a benefactive marker in combination with nondirectional predicates. Certain combinations allow for both readings, depending on the context, as is shown in example 6c.[8]

Example 6.

a. *Kófi* *bi* *bái* *dí* *búku* ***dá*** *dí* *muyé.*
Kofi TNS buy the book give the woman
"Kofi had bought the woman the book."
[Saramaccan; Byrne 1990, in Aikhenvald 2006, 26]

/be – ta – len/

b. PLEASE INDEX$_1$ PAY INDEX$_1$ $_1$**GIVE**$_2$ INDEX$_2$ PALM.UP.
"I want to pay you for it." [NGT; Bos 1996 [2016], 238]

c. *wǒ* ***gěi*** *tā* *xiě* *le* *yi* *fēng* *xìn.*
I for/to him write ASP one CL letter
"I wrote a letter for him." or "I wrote a letter to him."
[Mandarin Chinese; Li and Thompson 1981, 387]

Next to benefactives, "give" is also commonly used as a causative marker/auxiliary across typologically diverse languages. Causatives are semantically complex constructions that come in different types. In one type, called "manipulative" by Newman (1996) and "coercive causative" by Smith (1998), a person causes another person to do something. In this case, the GIVER is the causer, the RECIPIENT is the causee, and the THING is the (responsibility for the) action, as illustrated by the Alawa example 7a. In an extension of the coercive causative, in some languages, GIVER and RECIPIENT can be inanimate, as is true in in the Jacaltec example 7b. Note that in

this example, *'a'a* ("give") has grammaticalized into a bound causative morpheme. Finally, "give" may also be used in change-of-state causatives, where it often combines with psychological predicates. This use is exemplified by the Catalan Sign Language (LSC) example 7c. The authors gloss the causative auxiliary, which is grammaticalized from the lexical verb GIVE, as AUX-DA, based on the mouthing /da/ (from *dar* "give"), which accompanies the auxiliary (but not the lexical verb).

EXAMPLE 7.

a. *Lilmi-r•i* *mar•* *a-**muta**-ya-ngur•u* *da* *an-kir•iya.*
man-ERG carry he-give-PST-her PRT CL-woman
"The man made the woman carry it."
[Alawa; Song 1996, in Smith 1998, 224]

b. *Cake* *x-**'a'a**-ni-ayoj* *ixim* *awal.*
wind ASP-give-SUF-fall CL cornfield
"The wind made the corn fall down."
[Jacaltec; Craig 1977, in Newman 1996, 175]

/da/
c. EXAM $_3$**AUX-DA**$_1$ NERVOUS.
"The exam makes me nervous."
[LSC; Quer and Frigola 2006, in Steinbach and Pfau 2007, 320]

The last grammatical(ized) use of "give" that we address is its use as a marker of passive voice. We have already seen that "give" may be used as an affectedness marker. In passive-type meanings, the notion of "being affected beyond one's control" is extended to marking a non-agent (Lenz 2009). As the focus in this meaning extension is on the RECIPIENT, many languages actually use a "receive"-type rather than a "give"-type verb for passive marking, such as the English *get* in example 8a. In German, passives can be formed with *kriegen* ("receive/get") with some ditransitive verbs, as illustrated in example 8b. In example 6c, we already saw that Mandarin Chinese *gěi* ("give") can function as a recipient/affectedness marker; example 8c shows that *gěi* can also be employed as a passive marker, thus showcasing the relationship between the different metaphorical extensions of "give" (cf. also Yin 2004, 2023). To the best of our knowledge, the use of "give" as a passive marker has not yet been described for a sign language.

Example 8.

a. *They **got** arrested by the police last night.* [English; Reed 2011, 42]
b. *Sie **krieg**-t die neue Webseite ge-zeig-t.* [German]
she get-3sg the new website ptcp-show-circ
"She is shown the new website."
c. *Wǒ **gěi** tā piàn le.* [Mandarin Chinese; Li and Thompson 1981, 389]
I pass 3sg cheat pfv
"I was cheated by him/her."

Taken together, the examples presented in this section illustrate an increasingly abstract use of the notion of "giving": from concrete transfer of a THING to abstract transfer to more grammatical and auxiliary-like uses. While the basic meaning of "give" is more and more bleached along the way, we still observe in all cases the interaction of a GIVER/causer (which may be implicit) and a RECIPIENT/undergoer.[9] As for the THING, it turns from a concrete object (see figure 1) to an abstract object to a force exerted on an animate or inanimate undergoer.

The Present Study

The aim of the present study is to investigate the use of the verb meaning "give" in a single language (i.e., Sign Language of the Netherlands [NGT]), based entirely on naturalistic corpus data. Based on this data, we aim to answer the following questions:

1. What extensions from the underlying core meaning of concrete transfer, both in meaning and in constructions, are available for the NGT verb give?
2. How does this compare typologically to the uses of "give" verbs in other languages, both spoken and signed?
3. How can the extended uses be accounted for in terms of grammaticalization?

Given previous findings reported by Bos (1996 [2016]) and Couvee and Pfau (2018), we expect give in NGT to be used in light-verb-like abstract meanings as well as in SVCs. Since "give" has been shown to offer an extremely fruitful base for metaphorical extension and

grammaticalization crosslinguistically, we expect the ways in which GIVE is employed in NGT to correspond to functions of "give" reported for other languages, both spoken and signed. Likewise, we expect to find that the grammaticalization paths of GIVE in NGT will align with those proposed for other languages.

Our findings will add to the typological picture regarding "give" verbs and their extensions from a sign language perspective, and they will offer novel insights with respect to grammaticalization in NGT.

Method

For this study, data was collected from the Corpus NGT, an openly available corpus that consists of video recordings, recorded between 2006 and 2008, of ninety-two signers from different regions of the Netherlands. Videos are partly annotated and/or translated, with new annotations and translations still being added. The material consists of both free and elicited conversations, each conversation involving two signers (Crasborn and Zwitserlood 2008).

Participants

The data used for this study comes from forty-one signers, twenty-six women, and fifteen men. The other signers in the corpus did not produce any instances of GIVE. The participants were of varying ages (the youngest under twenty at time of recording and the oldest above eighty) and from different regions of the Netherlands. All participants have NGT as a first language, that is, they learned NGT before the age of four.

Corpus Search and Annotation

As corpus annotations are made in ELAN (an annotation tool for audio and video recordings; ELAN 2023; Crasborn and Sloetjes 2008), the corpus search was also performed in ELAN using the FAST-Search function, which allows for a case-sensitive search. Glosses in the Corpus NGT are consistently annotated in all caps, and the verb meaning "give" is annotated in its base (infinitival) form GEVEN. The gloss tiers could therefore be searched by entering GEVEN as a search term. This search yielded 130 hits. However, given that

the NGT verb GIVE occurs in both one-handed and two-handed form, and given that two-handed signs are glossed on two separate tiers (right/left hand), a number of these hits referred to the same instance and thus had to be excluded. After the doubles had been removed, seventy-one instances remained. Subsequently, we performed a search for *geven* (without capitals) on the translation tier, which returned ninety-six occurrences. Most of these hits were instances already found via the gloss search. Moreover, some were part of a translation of a different verb (e.g., the verb glossed as INFORMEREN ("to inform") was sometimes translated as *informatie geven* ("to give information")); these hits were excluded from further analysis, as they did not involve use of the verb GIVE. Furthermore, the search on the translation tier yielded five instances of GIVE signed with a classifier handshape (cf. example 2b). It turned out that these instances were not glossed as GEVEN on the gloss tier, but rather as MOVE (in English). Given this, we also searched for MOVE on the gloss tier, but this search yielded way too many unrelated results, as various types of classifier predicates are glossed as MOVE, not just those expressing the transfer semantics we were interested in. It was deemed too time-consuming to individually check all of these hits in order to identify further instances of classifier predicates expressing transfer. However, the five instances of MOVE that we found via the search on the translation tier were included in our dataset.

Remember from our discussion of example 3b that the verbs GIVE and RECEIVE are very similar in NGT: They employ the same handshapes, and they both can be spatially modified such that the hand(s) move(s) from the locus of the GIVER toward the locus of the RECIPIENT. In the Corpus NGT, "give/receive" verbs that are directed toward the signer are almost always glossed as KRIJGEN ("receive/get"). As there is, at face value, no semantic difference in how these two verbs are used, we performed a separate FASTSearch for KRIJGEN on the gloss tier in the corpus annotations (it turned out that on the translation tier, some of the instances we found were translated as "receive" and some as "give," depending on the context). After removing doubles, in the same way as explained for GEVEN above, fifty-five instances of "receive" remained. In the examples we

FIGURE 2. Three variants of NGT GIVE: (a) one-handed form of GIVE-A (money-hand)—end point of movement shown [17-S03-01:32]; (b) two-handed form of GIVE-B (flat-hand)—begin point of movement shown [255-S14-04:57]; (c) two-handed form of GIVE-C (beak-hand)—end point of movement shown [1914-S78-00:40].

are going to present, the meanings "give" and "receive" are treated as versions of the same verb and are therefore consistently glossed as GIVE (but see the discussion for a qualification of this decision).

As for the annotation of our data, three further procedures were applied. First, our search revealed that three different handshapes are used for the base forms of both GIVE and RECEIVE: the B-hand ( or ), the beak-hand (), and the so-called "money-hand" (); the use of these three variants is illustrated by means of screenshots in figure 2 (see also figure 4 in the Discussion section). In the corpus annotations, the three variants are distinguished by letters added to the gloss (i.e., GEVEN-A/KRIJGEN-A (money-hand), GEVEN-B/KRIJGEN-B (B-hand), and GEVEN-C/KRIJGEN-C (beak-hand). These letter codes have been ignored in our analysis and transcription—and, consequently, will not figure in the examples we are going to present.

Second, remember that GIVE can be spatially modified to align with the loci of its subject and indirect object arguments. However, the Corpus NGT does not include annotations for locus markers. Therefore, we recorded for each instance the start and end locus of the movement (subscripts 1, 2, 3a/3b—see endnote 3), as well as the arguments of the verb and their loci (or "no locus assigned"). Note that pointing signs—be they used as pronouns or for assigning an R-locus—were annotated for loci in the same way.

Finally, some of the videos from the Corpus NGT had previously been annotated for mouth actions (including mouthings). For all tokens of the verbs under consideration, the mouthing was thus either taken from the existing annotation or an annotation was added by the first author; for cases without mouthing, "none" was annotated. In the examples presented in the next section, only the mouthings that are of interest are given (i.e., mouthings accompanying the verb GIVE or, in some cases, its object).

Analysis

Once the spatial modification of the verb, the verb's arguments, and the mouthings had been identified and annotated for each example, examples were sorted into five categories: Concrete Transfer, Abstract Transfer–General, Abstract Transfer–Linguistic, Change of State, and Serial Verb Construction. Except for the latter category, which is based on the construction, the other categories are based on the type of THING that is involved in the event.

- In *Concrete Transfer*, the THING is a concrete physical object that can be manipulated by hand, for example BOOK.
- The category *Abstract Transfer–General* contains examples that denote transfer of an abstract but nonlinguistic/noncommunicative THING, such as CHANCE.
- In the *Abstract Transfer–Linguistic* category, we include examples in which a linguistic entity is being transferred; this can be a part of language, such as SIGN or SENTENCE, or a specific sign. THINGs that can be considered communicative entities, such as STORY, INFORMATION, or IDEA, also fall in this category.
- The *Change of State* category includes examples in which the state of the RECIPIENT is changed, for instance, cases in which the THING is an illness such as CHICKENPOX (meaning "RECIPIENT became sick with chickenpox") or DISABILITY (meaning "RECIPIENT became disabled").
- Finally, the *Serial Verb Construction* category covers all instances in which GIVE appears together with another verb in one clause; given the V+V combination, we decided to treat these instances as their own category; however, it is important to note that, as for the

type of transfer, they may actually fall under one of the first three categories listed here.[10]

In the Results section, we will address how these five categories align with the metaphorical and grammatical uses of "give" introduced in the previous section (e.g., LVCs, benefactive, and causative uses).

Not surprisingly, several examples did not fall neatly within one of the five categories. For example, in a combination like GIVE LUXURY, the sign LUXURY could either refer to concrete "luxury goods" or to a more abstract concept of "luxury." Such ambiguous examples have been classified conservatively as *Concrete Transfer*. All examples involving "money" of some kind as the THING were sorted as *Concrete Transfer*, too, while examples in which "time" of some sort was the transferred THING were classified as *Abstract Transfer–General*. Moreover, it turned out that some objects may belong to more than one category, depending on context and meaning. For example, the sign BABY in example 9a refers to a concrete baby that changes hands, whereas in example 9b, the same sign refers to the more abstract concept "baby," which, in combination with GIVE, has a *Change of State* meaning, namely "to become pregnant."

EXAMPLE 9.

a. BORN $_1$**GIVE**$_2$ BABY. [98-S02-01:03]
"When it is born, (they) hand you the baby."

b. IVF ARTIFICIAL BABY $_1$**GIVE**$_2$. [430-S21-00:15]
"IVF makes you pregnant artificially."

Results

Recall from the previous section that we searched for the glosses GEVEN ("give") and KRIJGEN ("receive/get") on the gloss tiers, as well as for *geven* and *krijgen* on the translation tier. These searches yielded 131 relevant instances of NGT GIVE/RECEIVE (five of which were actually classifier predicates glossed as MOVE on the gloss tier; also remember that in our examples, we gloss all instances as GIVE). In table 1, we provide an overview of the distribution of our data across the five different categories introduced previously.

We see that in our dataset, GIVE is used in an abstract or grammatical sense in more than two-thirds of the examples (69 percent).

Table 1. Distribution of tokens of "give" verbs extracted from Corpus NGT (N = 131) across the five categories; seventy-one of these instances were glossed as GEVEN, fifty-five as KRIJGEN, and five as MOVE

Total	Concrete Transfer	Change of State	Abstract Transfer		Serial Verb Construction
			General	Linguistic	
131 tokens (100%)	41 tokens (31%)	47 tokens (36%)	20 tokens (15%)	10 tokens (8%)	13 tokens (10%)

In the next five subsections, we will illustrate the various categories by means of selected examples, and we will also discuss how these examples relate to the various uses of "give"-verbs introduced in the section "On Giving: Metaphorical Extensions and Grammaticalization."

Concrete Transfer

In its prototypical, core meaning, "give" describes the transfer of a concrete item, which can be manipulated by the hand(s). In a "giving" event, the THING is first in possession of the GIVER, and is then transferred to the RECIPIENT, such that the GIVER is no longer in possession of the THING (see figure 1). Table 1 reveals that GIVE was used in its core meaning in less than a third of the examples (N = 41; 31 percent). This may seem surprising at first sight, but it has to be pointed out that in a good part of the annotated videos, the participating signers had been encouraged to converse about experiences related to deafness, deaf culture, and the deaf community. Obviously, these are issues that are not very likely to involve concrete giving events. Based on our data, we thus cannot conclude with certainty that GIVE would be employed more frequently for abstract or grammatical uses in NGT.

Out of the forty-one instances that were categorized as *Concrete Transfer*, only twenty-nine involved a fully canonical giving action, whereby a physical object is transferred from a GIVER to a RECIPIENT. Three of these are provided in examples 10a–c. In examples 10a and b, GIVE involves one of the basic handshapes illustrated in figure 2, while example 10c presents us with one of the cases in which the verb involves a classifier handshape—the  -handshape for small, cylindrical objects—and was therefore glossed as MOVE in the corpus

annotation. Seven examples describe the transfer of "money" in a somewhat more abstract sense; see example 10d. From the context, it is clear that the RECIPIENT was not handed the money, but rather that the money changed possession by means of bank transfer. Still, we subsumed such cases under *Concrete Transfer* since the GIVER starts out with the money and, after transfer to the RECIPIENT, does not have it in their possession anymore.

EXAMPLE 10.

a. BANANA $_1$**GIVE**$_{3a}$ MONKEY INDEX$_{3a}$. [523-S26-00:32]
"He gives a banana to the monkey."

b. NOW NEW BOOK [. . .], BEAUTIFUL PALM.UP, INDEX$_1$ FRIEND $_1$**GIVE**$_{3b}$ INDEX$_{3b}$ HEAR. [532-S25-02:44]
"There is a new book [about baby communication]; it is really neat; I gave it to a friend, who is hearing."

c. STILL $_{3a}$**GIVE**(🤏)$_1$ BEER $_{3a}$**GIVE**(🤏)$_1$+. [805-S35-03:32]
"Still, (he) kept on giving me beer."
/krijg/

d. INDEX$_2$ $_2$**GIVE**$_1$ MONEY INDEX$_3$ WORK INDEX$_2$ [129-S08-02:08]
"You get money for this work."

The remaining five examples appear slightly further removed from the core meaning, but we did include them in the *Concrete Transfer* category, as such an interpretation is still possible. In two of these examples, the THING is a cochlear implant (CI), which is indeed a concrete object; however, the meaning expressed is more along the lines of "implant someone with a CI" rather than transferring (control of) the entity to the RECIPIENT. The same line of reasoning applies to one example, in which the THING was SPERM (in the context of someone being a sperm donor for IVF). Finally, in two examples, the THING was LUXURY, which—as mentioned before—could refer to concrete "luxury goods" or to a more abstract notion of "luxury."

Abstract Transfer–General

We now turn to examples that encode the transfer of an abstract THING. We first address the general cases (N = 47) before focusing on examples that we consider to involve the transfer of a THING of a linguistic/communicative nature in the next section.

Thirty-eight of the examples from the *Abstract Transfer–General* group could be classified as LVCs. This classification implies that the notion of transfer of (control of) the THING is either considerably weakened or entirely lost, and that most of the semantic content of the event is expressed by the THING. Of these thirty-eight examples, twenty-eight denote abstract transfer of something that is to the benefit of the RECIPIENT, such as, for example, "a chance" (examples 11a and b), "interest" (11c), "love" (example 3a), "attention," or "work," while ten examples involve abstract transfer of something that is to the detriment of the RECIPIENT, such as, for example, "blame" (example 11d) or "punishment." We provide two examples with CHANCE in order to illustrate that the GIVER can be specified (example 11a) or can remain unspecified, with focus on the RECIPIENT in a "receive"-type meaning, as in example 11b (note also the presence of the mouthing /krijg/ "receive/get"). Example 11c is a particularly clear example of an LVC, as the focus is entirely on the THING (as is evident from the translation), and no RECIPIENT is specified (the movement of GIVE ends in the signing space in front of the signer, but this locus does not refer to the addressee in this case). Example 11d, which is repeated from example 5b, expresses a reciprocal meaning: The signer and the addressee are both GIVER and RECIPIENT of BLAME. In all thirty-eight examples, control of the THING starts with the GIVER, but what is transferred to the RECIPIENT is the effect of the action (e.g., being loved, being impacted by blame) rather than the control over the action.[11]

Example 11.

a. GOVERNMENT CAN SAME CHANCE $_1$**GIVE**$_{3a}$. [821-S35-00:50]
"The government can give them the same chance."

/krijg/
b. EVERYBODY MUST CHANCE $_2$**GIVE**$_1$. [60-S06-01:43]
"Everybody must get a chance."

hs
c. MANY YOUNG INTEREST $_1$**GIVE**$_2$ NOT. [137-S08-02:39]
"Many young people are not interested."

d. [. . .] WE.TWO INDEX$_1$ ALWAYS $_1$**GIVE**$_2$ BLAME AUX.REC.
"[. . .] (that) we always blame each other." [369-S20-00:44]

In nine examples in this category, the THING that is being transferred is in one way or the other related to the notion of "time." In three of these, the sign TIME is actually used, in the sense of "give someone time" or "spend time on an activity"—the latter being illustrated in example 12a. In the other six examples, involvement of the notion of time is less straightforward, as the THING that combines with GIVE is INTERPRETER. Now, an interpreter is obviously a concrete entity; however, the meaning that is expressed by the combination of GIVE+INTERPRETER is more abstract, as the examples are about "getting an interpreter to work for you (for a certain amount of time)," as illustrated by example 12b. From the context, it is clear that the THING is not a person, but rather interpreter hours, which are reimbursed by the insurance. In all six instances, the direction of the verb is toward the signer, and the GIVER is unspecified and therefore the example might be interpreted as a passive-like construction (as indicated in the translation).[12]

EXAMPLE 12.

a. TIME $_1$**GIVE**$_2$ BOARD PALM.UP. [137-S08-01:07]
"(But) giving time to (be on) a board?"

b. WE INTERPRETER $_2$**GIVE**$_1$ SIGN IX$_1$ RIGHT IX$_{3b}$. [256-S13-04:51]
"We receive/are given sign language interpreter hours, that is our right."

Abstract Transfer–Linguistic

Newman (1996) observes that "interpersonal communication," including any communicative act between person-like entities, is the most common metaphorical extension of "give" across languages. To do justice to this observation and offer a more fine-grained distinction, we decided to create a separate category *Abstract Transfer–Linguistic* (N = 20). Examples from our dataset that fit neatly into Newman's category include the transfer of abstract THINGs such as "a story" (example 13a), "information" (example 13b), "new ideas," or "a message" (N = 8).[13] Example 13b is intriguing, as the signer, despite the abstractness of the transferred entity, uses a two-handed classifier predicate (see figure 3), which functions metaphorically as a sort of quantifier to indicate "a stack/lot of information" (this predicate is thus glossed as MOVE in the corpus annotation). Also note

Figure 3. Two-handed classifier predicate used in example 13b, which encodes the transfer of an abstract linguistic entity, namely "a lot of information"—end point of movement shown [60-S06-02:39].

the presence of the NMM "puffed cheeks," which can be considered a derivational morpheme adding augmentative meaning.

Example 13.

a. DEAF SCHOOL STORY $_1$**GIVE**$_2$+++. [1915-S77-00:13]
"At the deaf school(s), the stories are passed on and on and on."

b. IX$_1$ HAVE IX$_1$ INFORMATION [. . .] STACK CAN $_1$**GIVE**()$_{3a}$ PALM.UP.
"I have the information, [. . .], I can give them a lot (of information)."
[60-S06-02:39]

As pointed out by Newman (1996), in a linguistic transfer, the GIVER does not lose ownership of the THING when transferring it, but rather shares it with the RECIPIENT. This is true for example 13, which relates to interpersonal communication, and it also holds for the ones given in example 14, which, however, are of a somewhat different nature. Our dataset includes a fair number of examples (N = 12) in which what is passed on relates in some way to NGT, the native language of the signers; this can be the sign language as a whole, for instance, when taught to children (example 14a), signs that are

passed on from generation to generation (example 14b), or a sign for a specific concept (e.g., in example 14c, the sign for a specific type of snack called *Hamka's*). The relatively high frequency of such "sign transfer" examples is likely due to the conversational topics that the informants were encouraged to talk about (i.e., issues related to deafness, deaf culture, and sign language).

EXAMPLE 14.

a. TRY DO.YOUR.BEST $_{1}$**GIVE**$_{3a}$ SIGN LANGUAGE. [254-S14-03:13]
"(The parents) must try to do their best to give (their child) sign language."

b. SIGN IX$_{1}$ KEEP FROM BEFORE GENERATION IX$_{3a}$ $_{3a}$**GIVE**$_{1}$
"I preserve the signs, the previous generation has passed them on to me."
[295-S17-01:18]

c. LATTICE HAMKA'S, YES, CALL OH.I.SEE $_{1}$**GIVE**$_{3a}$. [487-S24-02:17]
"The lattice(-shaped crisps), (the sign is) *Hamka's*, yes, someone asked me what it was, and I gave (the sign) to them."

d. IX$_{1}$ CHILD++ SIBLING OFTEN MOVE, FUN SIGN NAME $_{1}$**GIVE**$_{2}$ THINK.
"My children's friends often come to me; (they) think it is fun when I give them a sign name."
[859-S39-01:09]

In example 14d, we provide one more example that falls into the "sign transfer" group. In this case, a sign name is transferred. What distinguishes this example from examples 14a–c is that a "pass on"- or "share"-type reading is not available; rather, the THING is a kind of label (a name) that is assigned to the RECIPIENT. Note that example 14c is also about a label, but this label is not assigned to the RECIPIENT; rather, it is a preexisting label that is shared with the RECIPIENT.

Change of State

In ten examples from our dataset, the abstract THING that is transferred causes a change of state in the RECIPIENT. Only in one of these examples, provided in example 15a, is the change of a mental or emotional nature. Note that the signer uses the general sign FEELING and specifies the meaning by means of the mouthing /geluk/, which could either represent the noun *geluk* ("happiness") or part of the adjective *gelukkig* ("happy"). In any case, what is expressed here is a causative meaning: An unspecified GIVER (represented by the

signer's body in this impersonal construction) causes a positive change of state on the side of the RECIPIENT.[14] In the remaining nine examples, the change of state affects the physical state of the RECIPIENT, either because a sickness or impediment is transferred ($N = 5$) or because the RECIPIENT becomes pregnant ($N = 4$). Example 15b is of the former type, as it expresses that a person with a CI might get tinnitus; the focus is on the RECIPIENT, as is evident from the /krijg/ ("receive/get") mouthing. Still, the example clearly carries a causative meaning: It is the CI that causes the change of state. In example 15c, the signer explains that the problems that deaf people encounter in society make them disabled—so, again, we are dealing with a causative meaning, albeit in a more abstract sense.[15]

Example 15.

a. INDEX$_1$ BOTH$_{3b}$ /geluk/ FEELING $_1$**GIVE**$_{3b}$. [98-S01-05:02]
"[. . .] (but) one (can) make both of them happy."

b. SOMETIMES CI THEN /krijg/ $_1$**GIVE**$_2$ TINNITUS. [862-S39-02:52]
"Sometimes with a cochlear implant, (you) then get tinnitus."

c. COME IN SOCIETY IX$_{3a}$, RUN.INTO.PROBLEMS IX$_{3a}$, LIMITATION $_{3a}$**GIVE**$_1$.
"(You) come into society, run into problems, which make you disabled." [253-S13-02:18]

d. IVF ARTIFICIAL BABY $_1$**GIVE**$_2$. [430-S21-00:15]
"IVF makes you pregnant artificially."

An example involving pregnancy has already been provided in example 9b and is repeated in example 15d. The combination of GIVE and BABY may appear like concrete transfer at first sight, but what is expressed here is rather a causative change of state; the technique of IVF is the GIVER, and it causes the RECIPIENT, a general (impersonal) "you," to become pregnant.

Serial Verb Constructions

Previous studies by Bos (1996 [2016]) and Couvee and Pfau (2018)—the latter also analyzing data from Corpus NGT—have already noted that GIVE in NGT may participate in SVCs. Our corpus search yielded thirteen instances, in which GIVE combines with another lexical verb within a single clause—crucially, without a linking ele-

ment being present and with the two verbs expressing a single event (Couvee and Pfau only searched a part of the corpus and thus only report four SVCs involving GIVE).

Bos (1996 [2016]) hypothesized that the use of SVCs in NGT (not just the GIVE-type, but also SVCs involving TAKE, GO, and CALL) is motivated by agreement considerations; that is, the agreeing verb GIVE combines with plain verbs, which cannot be spatially modified, in order to indicate the subject and object of the event. This is the case in example 16a, which features the plain verb SAVE as a free verb in the SVC, and where the verb GIVE emphasizes that "some people" are the RECIPIENT of the abstract THING, that is, the saving action. However, as already noted by Couvee and Pfau (2018), GIVE may also combine with free verbs that are spatially modified themselves; this is illustrated in example 16b, where both PAY and GIVE are inflected for a first-person subject and a third-person object. In this example, GIVE clearly contributes a recipient meaning. Double-marking of arguments is also observed in example 16c, where the fact that the mouthing /doorgeven/ ("pass on") extends over both verbs indicates that we are dealing with a single event. The abstract THING that is transferred, information of some sort, is implicit in this example. Finally, in example 16d, the focus is on the RECIPIENT: The GIVER is not mentioned, and the "give" verb is accompanied by the mouthing /krijg/ ("receive/get"). The sign that we gloss as PUT.AROUND.NECK is a two-handed classifier predicate that depicts how the flower garland was placed around the RECIPIENT's neck.

EXAMPLE 16.

hs

a. IX_{3a} SELF CAN PREGNANT MAKE [. . .]. IX_{3b} $_{3b}$**GIVE**$_{3a}$ SAVE.
"Some people cannot get pregnant by themselves. They (the doctors) save them (with IVF)." [132-S07-01:07]

b. INDEX_1 $_1\text{PAY}_{3a}$ INDEX_1 $_1$**GIVE**$_{3a}$ DONE. [250-S13-06:01]
"I have paid them (the children) (for the cookies)."

/doorgeven/

c. ALSO $_1$**GIVE**$_2$ $_1\text{CALL}_2$. [1071-S48-01:05]
"I passed that (information) on as well."

/krijg/

d. INDEX_1 $_2$**GIVE**$_1$ PUT.AROUND.NECK GARLAND. [49-S06-04:43]
"I got a garland put around my neck."

In all the sentences in example 16, the arguments are shared between the two verbs in the SVC. However, our dataset also includes two examples in which GIVE combines with the verb TAKE.OVER. In these cases, the THING (e.g., signs) is taken over from someone and passed on to someone else; that is, the two verbs share the subject but have different indirect objects. Consequently, in these cases, the direction of movement is also different for the two verbs.

Looking at the SVC examples provided here, it is remarkable that they fall into different of the categories that we have established (see table 1): Example 16a is the only SVC example that belongs to the *Abstract Transfer–General* category; examples 16b and 16d express *Concrete Transfer* ($N = 5$), and example 16c can be classified as *Abstract Transfer–Linguistic* ($N = 7$). Moreover, in all examples, an SVC is employed to mark the RECIPIENT of the concrete or abstract THING.

Discussion

Having presented examples for the various uses of GIVE in NGT, we now discuss our findings against the background of previous studies on "give" verbs in spoken and signed languages. In the first two subsections, we offer a crosslinguistic perspective on our findings by (i) comparing the patterns we identified to those previously described for languages from both modalities, and (ii) comparing the handshapes employed for "give" verbs in different sign languages. In the next two subsections, we then address aspects of the grammaticalization of "give," again offering some crosslinguistic evidence. We propose a grammaticalization chain for GIVE in NGT, and we discuss the use of GIVE in passive-like constructions.

NGT in a Crosslinguistic Perspective

Let us now take stock of the patterns that we presented in the previous section and assess how these compare to patterns reported in the literature. In the section "On Giving: Metaphorical Extension and Grammaticalization," we presented data from various spoken and signed languages, which illustrate how, across typologically diverse languages and across modalities, "give" verbs are recruited to express more abstract and grammatical meanings. What is special

about the present study is that we were able to demonstrate, based on naturalistic corpus data, that various such uses are attested in a single language.

First, next to concrete uses of GIVE, we identified various types of metaphorical extensions of GIVE, where the transferred entity (i.e., the THING) is abstract, that is, cannot be manipulated by hand. This includes (i) cases in which the transferred entity is "time," (ii) instances of LVCs, where most of the semantic content is actually expressed by the THING (e.g., "give interest," "give blame"), and (iii) those cases that involve transfer of a linguistic entity of some sort (e.g., "give story," "give signs")—these examples are thus fully in line with the English, Dutch, and ASL sentences provided in examples 4 and 5. To the best of our knowledge, Wilcox (1998) is the only published work focusing on GIVE in a sign language, viz. ASL. She discusses metaphorical extensions of "prototypical GIVE" (GIVE-1, which in ASL involves what we called "beak-hand") and offers two examples. In one of these, the THING that is transferred is genetic heredity, which has been passed on from the grandmother to the signer. The other example is the one provided in example 4c, repeated here as example 17a, where the THING is a "legacy" that the signer received from his mother and which he, in turn, passed on to other deaf people. Crucially, this legacy includes sign language (next to a knowledge of deaf culture and history), and the example thus aligns to some extent with our example 14a ("give sign language").

EXAMPLE 17.

a. MOTHER $_{3a}$**GIVE-1**$_{center}$ L-E-G-A-C-Y [fingerspelled].
"Mother gave me a legacy (of sign language, deaf culture, and history)."
[ASL; adapted from Wilcox 1998, 197]

b. OR ATTENTION EXTRA $_{1}$**GIVE**$_{3a}$. [258-S14-00:48]
"[. . .] or by giving (the child) extra attention."
/krijg/

c. SOMETIMES $_{2}$**GIVE**$_{1}$ PUNISHMENT INDEX$_{1}$. [138-S07-02:03]
"Sometimes I got punished." (lit. "Sometimes I received punishment.")

Furthermore, Wilcox (1998, 201) explicitly argues that certain metaphorical extensions of "give" that are available in English cannot be realized by means of GIVE in ASL. According to her, GIVE might

be used in expressions like "give advice" or "give opinion," which relate to the transfer of information, but could never express meanings like "give permission" or "give a push/punch." Our data suggest that NGT is more permissive in this respect, as we do find examples like "give chance" (examples 11a and b), "give attention" (example 17b), "give punishment" (example 17c), and "give beat(ing)" (cf. also the Flemish Sign Language examples in endnote 8).

Second, we found in the Corpus NGT examples in which GIVE is used in an SVC to mark a RECIPIENT; as we have seen, in most of these cases, what is transferred is either a concrete entity or an abstract linguistic entity (example 16). This pattern is in line with what had previously been described for NGT by Bos (1996 [2016])—see example 6b—and also with findings reported for Hong Kong Sign Language (HKSL) by Lau (2012). A representative HKSL example is provided in example 18a. In spoken languages, SVCs involving "give" also commonly express a benefactive meaning ("to do something for [the benefit of] someone"). However, in our dataset, we did not come across this type—and neither is it reported by Bos or Lau. Of course, it could be argued that the mother in example 18a benefits from the buying event—after all, it is pleasant to receive a cake. Crucially, however, the event that is expressed involves concrete transfer of the cake to the RECIPIENT. Compare this to the Mandarin Chinese example 6c, repeated here as example 18b, which can receive both a recipient and a benefactive meaning. The benefactive meaning ("for him") does not imply that the indirect object referent receives the letter; he is the beneficiary of the writing event but not the recipient of the letter. Obviously, based on the corpus data alone, we cannot conclude that SVCs of the benefactive type are not possible in NGT. Still, we would like to hypothesize that it will be unlikely to find an NGT example like the hypothetical one offered in example 18c, given that GIVE iconically expresses transfer. Such an example would thus always receive the interpretation "I pay the ticket and give (it) to you." That is, the THING that is transferred may be abstract (as we have seen), but it must either be received by or directly affect the RECIPIENT. Further research is needed to verify whether our speculations regarding this matter are on the right track.

EXAMPLE 18.

a. SISTER EGG.CAKE BUY $_1$**GIVE**$_3$ MOTHER.
[HKSL; adapted from Lau 2012, 174]
"The sister bought a birthday cake and gave (it) to mother."

b. *wǒ* ***gěi*** *tā* *xiě* *le* *yi* *fēng* *xìn*.
I for/to him write ASP one CL letter
"I wrote a letter for him" or "I wrote a letter to him."
[Mandarin Chinese; Li and Thompson 1981, 387]

c. ?INDEX$_1$ WANT TICKET PAY $_1$GIVE$_2$.
"I would like to pay the ticket for you."
[hypothetical NGT example]

Third, we came across instances in which GIVE is employed to express a causative change of state, which may be of a mental ("make happy") or physical ("make pregnant," "make ill") nature—the former type of change of state has also been described for LSC (example 7c) as well as many spoken languages (Newman 1996), and the latter is exemplified by English expressions like *It gives me a headache/goose bumps*. A recent comparative study on French Sign Language (LSF) and Haitian Creole demonstrates that in LSF, GIVE readily combines with psychological predicates such as SAD or NERVOUS and with predicates expressing activities linked to psychological states such as LAUGH or BLUSH (example 19a; Cabredo Hofherr and Dadone 2023).[16] What we did not find in our data are coercive causatives of the type illustrated by the Alawa example 7a. Actually, Cabredo Hofherr and Dadone explicitly claim that "GIVE causatives in LSF do not allow volitional agentive predicates as complements"; therefore, example 19b is ungrammatical (but it could possibly mean "Mari gave Jean clothes to wash").[17] Finally, the same authors also observe that causative GIVE can be found in nonagentive inchoatives (example 19c), which are comparable to the Jacaltec example 7b—a use that was not attested in our data.

EXAMPLE 19.

a. PIERRE **GIVE**$_1$ SAD / LAUGH.
"Pierre makes me sad/laugh."
[LSF; Cabredo Hofherr and Dadone 2023]

b. ★MARI **GIVE** JEAN CLOTHES WASH.
"Mari made Jean wash clothes."

c. SUN$_a$ $_a$**GIVE**$_b$ ICE-CUBE$_b$ MELT$_b$./WATER$_a$ $_a$**GIVE**$_b$ METAL$_b$ RUSTY$_b$.
"The sun melts the ice cube"and "The water makes the metal rusty."

As for the last grammatical use of "give/receive" verbs introduced in the theoretical background (i.e., the use as a type of passive auxiliary), we did not come across clear cases of such a use in our data; however, we refer the reader to the section "The Final Step: Some Speculations on Passives," where we discuss this issue in some detail.

Lexicalized Classifier Handshapes and Metaphorical Extension

Before turning to grammaticalization, we complement our crosslinguistic perspective with a brief intramodal comparison of "give" verbs as used in three sign languages. We have seen that NGT employs three different handshapes for GIVE: the (flat) B-hand, the money-hand, and the beak-hand (see figures 4a–c).[18] Crucially, all three handshapes are also used as handling classifier morphemes. According to Zwitserlood (2003), the B-handshape classifies "large or bulky entities," the money-handshape "cylindrical or long, thin entities [. . .] that need more careful handling [. . .] and bank notes," and the beak-handshape "flat entities." As all three handshapes are also used for prototypical (i.e., nonclassificatory) GIVE, as well as for abstract transfer, we may assume that all three forms have undergone lexicalization, whereby the underlying handling semantics is lost. Similarly, Wilcox (1998) observes that for prototypical GIVE in ASL (GIVE-1), the form with the beak-handshape (in her terminology, "flat-O") is used; as was shown in example 17a, this handshape, too, can be used for abstract transfer. Yet, ASL features another form of GIVE (GIVE-2) involving

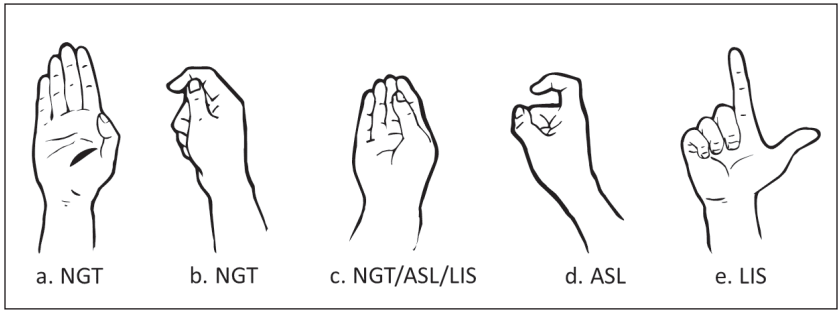

Figure 4. Handshapes used for the verb GIVE in ASL (c and d), Italian Sign Language (c and e), and NGT (a and c); the handshapes in (a–c) are also used as handling classifier morphemes; all handshapes can be used for concrete and abstract transfer.

the X-handshape (see figure 4d). Wilcox (1998, 188) notes that while GIVE-1 expresses "an everyday type of giving," GIVE-2 encodes additional semantic information, namely "the senses of 'permanent possession,' 'money,' and 'value.'" There is a documented historical relationship between LSF and ASL (Lane 1984) and Wilcox (1998) shows that the X-handshape is indeed found in a number of LSF signs related to money (e.g., BUY and EXPENSIVE). In this sense, the X-handshape may be related to the NGT money-hand; however, it is not used as a classifier morpheme. Wilcox further demonstrates that the X-handshape can also be used for abstract transfer. In fact, in the continuation of example 17a, the signer uses a variant of GIVE-2 when expressing that he passed on the legacy to other deaf people.

Italian Sign Language also uses the beak-handshape (figure 4c) for GIVE, but in addition features a form of GIVE, which is two-handed and involves the L-handshape (figure 4e) on both hands. Santoro and Aristodemo (2021) observe that both variants may express abstract transfer, specifically causative change of state, but that there is a semantic difference: While the variant with the L-hands (DARE-2) can be used in positive and negative environments (e.g., DARE-2 CALM, DARE-2 NERVOUS), the variant with the beak-hand (DARE-1) can only be used in positive environments.

Taken together, all three sign languages considered here employ at least one "give" verb with a lexicalized handling classifier handshape that can also be used for the expression of abstract transfer. In addition, ASL and Italian Sign Language each employ one variant of GIVE with a nonclassifier handshape. In contrast, in NGT, all three variants of GIVE involve a (lexicalized) classifier handshape. At face value, the fact that the three sign languages have extended the use of their "give" verbs to metaphorical and grammatical uses is, of course, not surprising, given how common this pattern of extension is among unrelated natural languages. What is intriguing is the fact that across sign languages, at least some of the underlying "give"-verbs iconically express the transfer of an object *by hand*. We consider this highly interesting in light of Meir's (2010) observation that the metaphorical extension of iconic forms is subject to constraints (in Israeli Sign Language, ISL). She reports, for instance, that a metaphor like "The acid ate the metal" cannot be expressed in ISL in the same way, given

that the ISL verb EAT iconically refers to the mouth. In this way, an iconic feature of EAT, viz. its place of articulation, clashes with the metaphorical meaning of "eat" in the example, which relates to consumption. Clearly, in the case of "give," the metaphorical extension is triggered by the transfer meaning which characterizes the verb. Yet, the iconicity associated with the handshapes depicted in figures 4a–c, that is, the iconic feature "manipulate by hand," is expected to clash with the metaphorical extension in example 19 in the same way as the iconic feature "consume by mouth" clashes with the metaphorical extension of EAT. Apparently, the "cognitive force" (Heine 1993) motivating the extension toward abstract transfer is strong enough to overwrite the iconicity constraint in this specific case.[19]

Grammaticalization of GIVE

Various studies have demonstrated that lexical items in sign languages may grammaticalize into functional elements and, what is more, that—for the most part—they follow grammaticalization paths that have been identified for spoken languages (e.g., noun to pronoun and verb to auxiliary)—that is, these grammaticalization paths are modality-independent (for overviews, see Pfau and Steinbach 2006; Janzen 2012).

One of the characteristics of grammaticalization is semantic bleaching (Kuteva et al. 2019), and this is what we observe in the case of GIVE: While the transfer semantics of the underlying verb appears to be preserved in all examples, the THING becomes increasingly abstract, and the role of the RECIPIENT also changes along the way. We propose to distinguish the following types of uses: (i) examples in which the focus is still on the transfer semantics of GIVE but which involve an abstract THING; (ii) examples in which the notion of transfer has eroded such that most of the remaining meaning encodes focus on the RECIPIENT; (iii) examples in which the meaning shifted even further and which denote the effect of the THING on the RECIPIENT; (iv) examples in which focus on the RECIPIENT has grammaticalized to marking a nonagent (i.e., into a passive marker). In examples 20–23, we offer examples illustrating types i–iii, while type iv will be addressed in the next subsection.

Example 14b, repeated here as example 20a, which expresses abstract (linguistic) transfer, provides us with a clear example of type i. In this example, there is no further marking, but occasionally, the transfer ("pass on") meaning is further emphasized by a mouthing. This is illustrated in example 20b, where the mouthing /doorgeef/, which accompanies GIVE, is the stem of the Dutch prefixed verb *doorgeven* (literally "through-give," meaning "pass on"; see also example 16c). Compare this to the Bulgarian example 20c, where the "pass on" meaning—especially if it involves an intermediary in the transmission—is also encoded by a prefix (which is derived from the preposition *prez* "through"). "In its basic spatial sense, the preposition traces the path or tunnel through which a trajector moves on the way to some goal. In its use as a prefix [. . .], it functions in an analogous way to highlight a path of communication" (Newman 1996, 140).

EXAMPLE 20.

a. SIGN IX_1 KEEP FROM BEFORE GENERATION IX_{3a} $_{3a}$**GIVE**$_1$.
"I preserve the signs, the previous generation has passed them on to me."
[295-S17-01:18]

b. CAN $INDEX_1$ FUTURE ALSO /doorgeef/ $_1$**GIVE**$_2$. [435-S22-01:56]
"I will also be able to pass on (old number signs)."

c. *pre-**davam*** *săobštenie* [Bulgarian; Newman 1996, 141]
through-give message
"give (someone) a message"

Examples of type ii include the LVCs and some of the SVCs. These are also the cases in which most of the meaning is actually contributed by the THING, as is illustrated by example 21a, which could be translated as "give support" or just "support." Clearly, the main function of GIVE here is to mark (or emphasize) the recipient (also compare the LVC involving PUNISHMENT in example 17c and the SVC with PAY in example 16b). While these examples all have a meaning that assumes a RECIPIENT (i.e., "to support/punish/pay *someone*"), we also found instances in which GIVE is employed to add a RECIPIENT. Interestingly, this is illustrated in example 21b as the signer, instead of just using the sign USE, which does not assume a RECIPIENT,

employs an SVC-like construction in which GIVE combines with the mouthing /gebruiken/ ("to use"). This changes the meaning from "use their voice (no matter if there is anyone to perceive it)" to "use their voice to(ward) someone (for communication)."[20]

Example 21.

a. $_{1}$**GIVE**$_{3b}$ SUPPORT INDEX$_{3b}$ KNOW RESEARCH. [256-S14-06:17]
"We must support scientific research."

/gebruiken/
b. DEAF INDEX$_{2}$ DIFFICULT VOICE $_{1}$**GIVE**$_{2}$. [173-S10-04:27]
"It is difficult for deaf people to use their voice (to someone)."

In the LVCs and SVCs just discussed, the transfer semantics of GIVE has been bleached considerably, and the meaning mainly comes from the lexical content of the item GIVE combines with (be it a noun or another verb). In a small number of cases, the meaning shifted even further, denoting the effect of the THING on the RECIPIENT—these are the cases that encode a change of state, such as type iii.

In some of the change-of-state examples, no GIVER (i.e., initiator or causer) is specified. In these cases, GIVE expresses a meaning comparable to English "become/get." The two contexts in which signers in the corpus used this construction are "become/get pregnant" (example 22a) and "become/get ill/afflicted with X," as in example 22b. In the former example, the locus specified as "1" is actually close to the signer's belly, which, in combination with the context, yields the literal meaning "to get a child in one's belly" (while signing DEAF HEARING with his left hand, the signer's eye gaze is at his right hand, which articulated $_{2}$GIVE$_{1}$ and is held in front of his belly; this indicates that "deaf/hearing" should be interpreted as characteristics of the unborn child). As for example 22b, the THING has been mentioned in the previous context but, again, no GIVER is specified. When a GIVER is specified, we arrive at a clearer causative meaning. This is true for examples 15d and 15b, repeated here as examples 22c and 22d. These examples are also about pregnancy and a medical condition, respectively, but the GIVER (i.e., the causer) is made explicit: IVF causes pregnancy, and a CI may cause tinnitus (also recall the "give happy" example 15a).[21]

EXAMPLE 22.

a. $_{2}$**GIVE**$_{1}$ DEAF HEARING WE.WILL.SEE PALM.UP. [332-S15-00:20]
"When you become/get pregnant, you don't know whether (the child) will be deaf or hearing."

b. POSS$_{1}$ DAUGHTER ALREADY $_{1}$**GIVE**$_{2}$. [170-S09-04:34]
"My daughter already got/had it (chickenpox)."

c. IVF ARTIFICIAL BABY $_{1}$**GIVE**$_{2}$. [430-S21-00:15]
"IVF makes you pregnant artificially."

/krijg/

d. SOMETIMES CI THEN $_{1}$**GIVE**$_{2}$ TINNITUS. [862-S39-02:52]
"Sometimes with a cochlear implant, (you) then get tinnitus."

Across the examples provided in this section, we thus observe a decrease in semantic content of the underlying verb (semantic bleaching), which goes hand in hand with an increased grammatical status of GIVE (decategorization). In fact, it has been argued for both LSC (see example 7b) and Greek Sign Language (see endnote 15) that GIVE has grammaticalized into a causative auxiliary, a functional element (see Pfau and Steinbach 2013 for a formal account)—and our data suggest that the same has happened (or is in the process of happening) in NGT.[22] The semantic and grammatical changes that the corpus data present us with are fully in line with what has been proposed for the grammaticalization of "give" verbs in many unrelated spoken languages, and we thus propose the grammaticalization path in figure 5. This scenario follows Lord, Yap, and Iwasaki (2002) and Kuteva et al. (2019), who argue that the Recipient/Dative chain (that also includes benefactive uses of "give," which were not attested in our

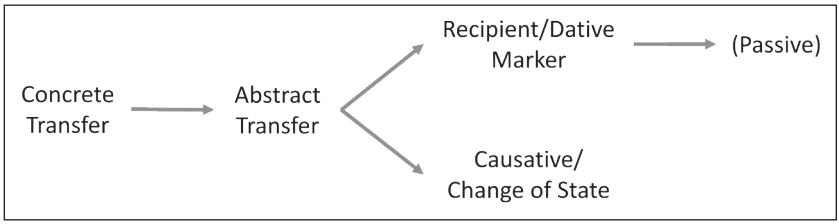

FIGURE 5. Proposed grammaticalization path for the transfer verb GIVE in NGT, which includes two separate chains.

data) and the Causative chain are separate chains. In the former, the focus gradually shifts to the RECIPIENT, and ultimately, if the recipient is affected beyond its control, this may give rise to passive uses of GIVE (see next section). In contrast, in the latter chain, the relevant semantic component is the effect of the transfer on the RECIPIENT.

The Final Step: Some Speculations on Passives

In the section "Grammatical(ized) Uses", we presented example 8c from Mandarin Chinese, which illustrates that *gěi* ("give") has grammaticalized into a marker of passive voice. In the context of this example, we also mentioned that the use of "give" as a passive marker has not yet been described for a sign language—and this is also the reason why we put "Passive" between brackets in figure 5.

Indeed, our data does not provide us with evidence for the existence of a passive auxiliary in NGT. Yet, there are some examples that can be interpreted as passive-like structures. Before entering this discussion, we need to briefly get back to our decision regarding GIVE vs. RECEIVE in NGT. Recall that we decided to use the gloss GIVE also for signs that were glossed as KRIJGEN ("receive/get") in the Corpus NGT, assuming that the only difference was that the "receive" instances are directed towards the signer. However, in the course of analyzing the examples, an interesting pattern surfaced regarding examples with "receive"-type meanings. About a fifth of the examples in the dataset (N = 27) are accompanied by the mouthing /krijg/ ("receive/get"). All of these instances involve a B-handshape, are directed toward the signer, regardless of the R-locus of the RECIPIENT, and do not have a specified GIVER. These instances behave so regularly—both with respect to form and argument structure—and so differently from GIVE with a "give"-type meaning that we are inclined to conclude that NGT does feature a bona fide RECEIVE verb, which is distinct from GIVE.

Another fifteen examples, which are also directed toward the signer and glossed as KRIJGEN ("receive/get") in the corpus, do have a specified GIVER and do not feature a mouthing. In our opinion, these are genuine instances of GIVE with a first-person RECIPIENT (and thus should have been glossed as such in the corpus). To illuminate the difference, compare the two instances of GIVE in example

23a. The first instance is accompanied by the mouthing /krijg/, the conversation partner is the RECIPIENT, but the verb is still directed toward the signer. The second instance of GIVE is clearly different: There is no mouthing, its starting point aligns with the R-locus of the GIVER ("they" = "the people running the experiment"), and there is a general, unspecified RECIPIENT (the two verbs also have different handshapes: the first one a B-handshape and the second one a beak-handshape).

EXAMPLE 23.

/krijg/

a. IX$_2$ $_2$**GIVE**$_1$ MONEY IX$_3$ WORK IX$_2$, [. . .] LEARN SURE MONEY $_{3a}$**GIVE**$_1$.
"You get money for this work, [. . .] you learn (something), and yet, they give you money." [129-S08-02:08]

b. $_2$**GIVE**$_1$ INDEX$_1$ WORK. [331-S16-01:16]
"I was given work" or "Someone gave me work."

Clearly, if it wasn't for the mouthing, the first part of example 23a might also be translated as "You are given money." Our dataset actually includes examples like this (N = 12), that is, examples without a specified GIVER and without mouthing, which are directed toward the signer—and at least some of these can be interpreted as passive-like agent-backgrounding structures (for agent-backgrounding in LSC, see Barberà and Cabredo Hofherr 2017; for impersonal passives more generally, see Cabredo Hofherr 2017). An example is provided in 23b. The two translations indicate that it cannot be decided with certainty whether this is indeed a passive-like structure or an impersonal construction.

It is noteworthy that similar examples, also involving GIVE, have been reported for ASL. Example 24a is very similar to example 23b, except that the THING that is given is concrete. Janzen, O'Shea, and Shaffer (2001, 294) note that "[n]o agent is specified, the patient rather than the agent is in focus, and although the locus *a* is morphosyntactically required in the spatial-agreement system of the verb, these loci are not filled with any semantic material." Hou (2022a) describes similar examples, noting that these are only semantically marked but not morphologically or syntactically. Therefore, she uses

the term "non-dedicated passives." What distinguishes example 24b from examples 23b and 24a is that GIVE moves between loci in the signing space, as there is a third-person RECIPIENT (see also Rankin 2013).

Example 24.

y/n

a. $_{a}$**GIVE**(2h)$_{1}$ TROPHY. REMEMBER. [ASL; Janzen et al. 2001, 293]
"We were given the trophy. Remember?"

b. HEY WHAT.DO HAPPEN $_{3a}$**GIVE**$_{3b}$ WRONG ENVELOPE TO THAT THOSE-TWO PEOPLE WHO [. . .]. [ASL; adapted from Hou 2022a, 10]
"Hey, so what happened was that the wrong envelope was given to those people who [. . .]."

While examples 23b and 24 certainly have a passive "flavor" to them, it should also be clear that GIVE still functions as the main verb in all of them; that is, it has not grammaticalized into a dedicated marker of passive voice or a passive auxiliary. In fact, both Janzen et al. (2001) and Hou (2022a) report for ASL that other verbs of concrete or abstract transfer can be used in a similar way (e.g., CONVINCE, AWARD, and NAME in the sense of "to give a name"). Since the focus of our corpus search was on GIVE, future research will have to investigate whether NGT allows for comparable agent-backgrounding structures with other verbs.

Finally, our dataset includes a few instances that are reminiscent of "get" passives in English (e.g., *We got arrested/punished/caught*; Reed 2011). These are cases that look like example 23a, with mouthing /krijg/ and movement toward the signer, but in which the RECIPIENT is an affectee. Relevant examples have been provided in examples 16d and 17c and are repeated in example 25 for the reader's convenience; the first one is an SVC, and the second one is an LVC. Example 25a, which describes the transfer of a concrete object (GARLAND), is reminiscent of the receptive passive in Dutch, a construction that is highly restricted to verbs that encode a strong notion of transfer (Colleman 2010). Example 25c illustrates that a receptive passive can be formed with the verb *toesturen* ("to send to"); however, the same sentence would be ungrammatical with, for instance, *kopen* ("to buy") as the main verb (cf. also the German example 8b).

Example 25.

/krijg/
a. INDEX$_1$ $_2$**GIVE**$_1$ PUT.AROUND.NECK GARLAND. [49-S06-04:43]
"I got a garland put around my neck."

/krijg/
b. SOMETIMES $_2$**GIVE**$_1$ PUNISHMENT INDEX$_1$. [138-S07-02:03]
"Sometimes I got punished." (lit. "Sometimes I received punishment.")

c. *Ik kreeg een boek toe-gestuurd.* [Dutch]
I get.PST a boek to-send.PTCP
"I was sent a book." (lit. "I got sent a book.")

Conclusion

For this study, 131 examples involving the transfer verb GIVE have been extracted from the Corpus NGT. Analysis of these examples revealed that in most of them, GIVE does not express concrete transfer. Rather, we find that the meaning of the verb is commonly metaphorically extended to abstract transfer (e.g., "give attention"), and that it may also fulfill functions of a more grammatical nature, such as recipient marking or expressing a (causative) change of state (e.g., "give illness"). We also confirmed the finding—previously reported by Bos (1996 [2016]) and Couvee and Pfau (2018)—that for encoding some of these more abstract meanings, GIVE may combine with another verb in an SVC.

Examples offered in Newman's (1996) impressive monograph on "give," as well as some of the examples we presented in the section "On Giving: Metaphorical Extension and Grammaticalization," make clear that it is common for spoken languages (such as Mandarin Chinese) to use "give" in more than one abstract or grammatical sense. However, ours is the first study to offer a comprehensive overview of various different uses of GIVE in a single sign language. Our findings align with patterns of use that have been described for typologically diverse spoken languages and a handful of sign languages. In fact, we did not come across a pattern that would be unique to NGT. This crossmodal uniformity may not be surprising given that it has been claimed that certain cognitive forces drive metaphorical extension and grammaticalization—in our case, the transfer semantics associated with the underlying verb, which can be extended in various, yet clearly limited, ways. These commonalities notwithstanding, we identified

some features that are specific to the visual-spatial modality, such as (i) the iconicity characterizing GIVE (i.e., manipulation of object by hand), which—while not blocking metaphorical extension—seems to impose a constraint on the meaning extension, as use as a benefactive marker has not been attested in our data; (ii) the use of mouthings to disambiguate "give"- and "receive"-type events in NGT; and (iii) the fact that in some of the SVCs, GIVE appears to fulfill an additional morphosyntactic function, namely the expression of agreement (see Steinbach and Pfau 2007 and Sapountzaki 2012 for discussion of agreement auxiliaries in sign languages).

Finally, we also offered some speculations on the grammaticalization of GIVE. When it comes to claims about grammaticalization in a sign language, it has to be emphasized that—given that sign languages are unwritten, and therefore for the longest time undocumented, languages—the diachronic data that are required for making strong claims are usually not available (Pfau and Steinbach 2006, 2011). Consequently, such claims have to be taken with a grain of salt. The grammaticalization path we sketched is inspired by common pathways that have been identified based on data from spoken languages for which written records do exist. The important point here is that we have no reason to assume that NGT (or any other sign language for that matter) would follow entirely different, modality-dependent paths in the grammaticalization of transfer verbs. However, this should not be taken to imply that modality-specific paths do not exist at all (see, e.g., Pfau and Steinbach 2013 for an N-to-Aux path in DGS).

As a caveat to our study, we add that corpus data always come with certain limitations. On the positive side, the Corpus NGT offers us naturalistic data produced by native signers in communication with each other. We may thus assume that the examples we extracted are indeed licensed by the grammar of NGT. Yet, we have to keep in mind that the corpus does not provide us with negative evidence, that is, we cannot say with certainty that other uses of GIVE are not attested in NGT—they might simply be very rare (recall, for instance, our discussion of the absence of benefactive uses of GIVE). Related to this is the fact that the corpus provides us with a snapshot of the language from approximately sixteen years ago. Sign languages are known to be capable of changing quite rapidly. Consequently, some uses of GIVE that were rare in our dataset might be more common

now, and other uses might have entered the grammar of NGT in the meantime. We hope that future studies, which ideally would combine corpus work with data elicitation and/or grammaticality judgments, will shed light on these and related matters.

Acknowledgments

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Notes

1. Throughout this article, we follow Newman (1996) and use capitals when discussing the semantically defined categories of GIVER, THING, and RECIPIENT.

2. "Take"-type verbs also share interesting properties with "give"-type verbs, and have been shown to commonly be the base for various semantic extensions; however, they are outside the scope of the present study.

3. Notation conventions: Signs are glossed in English SMALL CAPS, which represent (approximations of) the signs' meaning; if two words are needed to gloss a single sign, they are separated by a period (e.g., WE.TWO); INDEX/IX represents a pointing sign, POSS a possessive pronoun; "+" signals reduplication (for plural or aspectual marking), the number of "+" indicating the number of repetitions. Subscript numbers/letters accompanying INDEX and certain verbs/nouns refer to loci in the signing space (1 = locus close to the signer's body; 2 = locus close to the addressee; 3 = locus toward the right (3a) or left (3b) side of the signing space; a/b = loci in signing space). Lines above the gloss indicate the presence of a NMM, the length of the line indicating the scope of that marker; "hs" stands for a negative headshake, "y/n" for a nonmanual marking yes/no-questions (see also endnote 5). Examples from the Corpus NGT are accompanied by a code that specifies the video number, the signer (S), and the time at which the example can be found within the clip.

4. The picture we sketch here is very much simplified, but sufficient for our purposes. For overviews of sign language agreement, see Mathur and Rathmann (2012) and Quer (2021); for critical assessment of the grammatical status of the spatial modification of verbs, see Lillo-Martin and Meier (2011), Pfau, Salzmann, and Steinbach (2018), and Schembri, Cormier, and Fenlon (2018); for typological differences among sign languages in the domain of spatial grammar, see De Vos and Pfau (2015).

5. Mouthings are provided in Dutch orthography between slashes (/xxxx/), but—for readability—not in their phonetic form. Occasionally, a mouthing only presents a part of the Dutch word (e.g., /gegeve/ in example 3a).

6. Note that this use is reminiscent of the common Dutch expression *de schuld geven* (lit. "to give blame/guilt"); we may thus be dealing with an instance of borrowing.

7. For discussion of different types of metaphors in various sign languages, see, for example, Brennan (1990), Wilcox (2000), Russo (2008), Roush (2016), Kimmelman et al. (2017), Zeshan and Palfreyman (2019), and Hou (2022b).

8. In some languages, the use of "give" has extended to a general affectedness marker, marking not only benefactives but also malefactives (Fagerli 2001). In Flemish Sign Language, for instance, GIVE can be used in examples like MAN GIVE DOG CARESS ("The man is caressing the dog") but also in GIRL GIVE BOY HIT ("The girl hits the boy") (Van Herreweghe and Vermeerbergen 2004).

9. German presents us with an interesting case in which the underlying transfer semantics is lost, viz. the use of *geben* ("give") in existential constructions, where it combines with an expletive subject, for example, *Es gibt eine neue Ausstellung im Guggenheim* ("There is a new exhibition at the Guggenheim") (Newman 1998).

10. Across sign languages, nouns and verbs are often not easily distinguished (e.g., Schwager and Zeshan 2008; Meir 2012). In NGT, for instance, the sign BIKE can mean "bicycle" or "to bike," depending on the context (cf. English *love* or *paint*). When classifying a construction as an SVC, we have been conservative. If the sign combining with GIVE could be used as a noun or verb (as is true, for example, for the sign SUPPORT; cf. example 21a), then we classified the construction as an LVC and thus sorted it into one of the other categories.

11. In the remaining two examples, the THINGs are ACCIDENT and RELATIONSHIP, and the meaning expressed is "get into an accident" and "get into a relationship," respectively. In both cases, the GIVER is unspecified (in fact, no GIVER can be construed for these events), and the movement of GIVE proceeds towards the signer.

12. It should be noted that these six examples were produced by only two different signers, five of the instances actually being from the same participant.

13. The example in which a message is transferred is interesting, as the THING is only expressed by the mouthing /boodschap/ ("message"), which is realized simultaneously with GIVE [256-S14-06:11].

14. This example is also reported in Couvee and Pfau (2018, 15), where it is glossed and translated differently. Closer inspection of the example in

Corpus NGT, however, suggests that the glossing and translation offered by Couvee and Pfau are not fully accurate. Still, these authors, too, assign a causative meaning to the example.

15. Note that Dutch *beperking* can mean "limitation" in a general sense, but also "handicap/disability."

16. For Greek Sign Language, Sapountzaki (2005) reports similar examples involving combinations like GIVE+HAPPY/CALM ("make happy/calm") and also examples expressing physical change of state like GIVE+HEADACHE ("cause a headache"). For constructions involving GIVE and psychological predicates in Italian Sign Language, see Santoro and Aristodemo (2021).

17. For Georgian Sign Language, Makharoblidze (2015) describes an indirect object marker expressing causation, which can be used in coercive contexts (e.g., "I make him/her do something"). However, according to Makharoblidze, this marker is not related to the verb "give" but rather developed from a verb meaning "to give an order/task."

18. Note that the B-hand has allophonic variants with thumb extended (see figure 2b) or fingers slightly bent or fingers spread.

19. Remember, however, that we speculated in the previous section that iconic constraints might still be at play. We put forward the hypothesis that the iconic transfer component present in all forms of GIVE cannot be overwritten, which blocks the use of GIVE as a benefactive marker, at least in NGT.

Obviously, "give" verbs in spoken languages are not iconic in the same way. Still, English, for instance, can express transfer also by means of the verb *hand (over)* —the sentences "I gave him a book" and "I handed him a book" are semantically very close. We assume that, across spoken languages, transfer verbs which involve "hand" should be much less likely to undergo metaphorical extension toward abstract transfer.

20. Janssen (1998) notes an interesting parallel case in Dutch. In case of a screaming event, Dutch can simply use the verb *gillen* ("to scream"). Alternatively, the noun *gil* ("a scream") may combine with a (light) verb, either *slaken* ("let out") or *geven* ("give"). Only in the latter case, "the scream at issue can be assumed to have been audible to at least one person" (Janssen 1998, 301). That is, in this particular case, *geven* adds a RECIPIENT to the screaming event, even though the RECIPIENT can remain unspecified—similar to what we observe in example 21b.

21. Spanish presents us with similar change-of-state vs. causative pairs in clauses in which *dar* ("give") combines with a noun designating a psychological/physical state (e.g., *celos* "jealousy"). When no causer is mentioned, we arrive at a change-of-state meaning (e.g., "Eva got jealous"); when a causer is added, the meaning becomes causative (e.g., "Luis made Eva jealous") (Alba-Salas 2012, 365). Just as in NGT, both constructions have a

RECIPIENT focus: The recipient *Eva* is dative-marked even when there is no GIVER.

22. Recall that the Corpus NGT has been compiled between 2006 and 2008; that is, our study captures the state of NGT from about sixteen years ago. It may well be the case that some of the construction types that are rare or absent in our dataset have become more prevalent in the meantime.

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