Gender-Fair Language in the Translation of Signed DGS-KORPUS Utterances in the DGS-Korpus Project Relevance and Challenges

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Abstract

This project note discusses the challenges of translating from German Sign Language (DGS) – a language that generally does not mark gender on a sign that refers to a person – into German – a language that requires overt gender-markings. This is done in light of the current on-going socio-political discussion in Germany about the best and most appropriate approaches to gender-fair and genderinclusive forms for terms denoting people. This project note represents preparatory work based on which the lexicographic team of the DGS-Korpus project chose its policy for gender-fair language in the upcoming DGS-German dictionary. It focuses on the translation of DGS corpus material for the use of authentic examples as well as on the phrasing of additional explanatory information given in the dictionary in written German. Aspects considered are gender-inclusiveness, authenticity of translation, readability and socio-political impact of the choice to be made.

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1 Introduction

During recent years, gender-fair language has been receiving increasing amounts of attention in Germany by the public and the media as well as by universities and government institutions (cf. Brandau, 2016; Beerheide and Schmieding, 2019; Hannover.de 2019). Therefore, it is necessary for a university-based linguistic research project such as the DGS-Korpus project which analyzes German Sign Language (Deutsche Gebärdensprache; DGS) to take into account these developments when producing translations from a signed to a written language. In this project note we will discuss the use of gender-fair language in the production of the corpus-based DGS-German dictionary Digitales Wörterbuch DGS¹. Our aim is to raise awareness of the importance of the subject and to initiate a discussion on its relevance as well as on possible solutions within and outside of the (corpus-) linguistic community. The work presented here is based on a presentation that was held during the SignNonmanuals Workshop 2 in Graz on May 3-4, 2019 (Löffler et al., 2019). It describes the research and discussions that preceded the establishment of conventions regarding gender-fair language in the lexicographic work of the DGS-Korpus project.²

The working paper is structured as follows: First, we provide a working definition and some background information on gender-fair language as well as on the lexicographic work of the DGS-Korpus project (Section 2). This leads us to the question why reflections on gender-fair language are relevant during the production of a DGS-German dictionary (Section 4). In Section 5 we turn to how grammatical gender is expressed in written German and in DGS, respectively. Our arguments concerning gender marking in DGS are based on a review of selected data from the DGS corpus.³ In Section 6 we describe the difficulties concerning gender-fair language that arise when translating from DGS to German. Our paper concludes with an overview of the issues discussed and with a proposal for a transparent approach (Section 7).

¹A pre-release version of the dictionary can be found at http://dwdgs.meine-dgs.de/

²At this point we would like to thank the other members of the lexicographic team of the DGS-Korpus project for helpful discussions and their support.

³For our analysis we used data from the DGS corpus which are partly accessible in the Public DGS Corpus. The Public DGS Corpus consists of 49.01 hours of edited material from the DGS corpus (Konrad et al., 2020).

2 Gender-fair language

Sczesny et al. (2016) conceive gender-fair language "as part of a broader attempt to reduce stereotyping and discrimination in language" and argue that gender-fair language "aims to abolish asymmetries in referring to and addressing women and men, for example, by replacing masculine forms (*policeman*) with gender-unmarked forms (*police officer*), or by using both masculine and feminine forms (i.e., *the applicant... he or she* instead of *the applicant... he*)" (Sczesny et al., 2016). Using their conception of gender-fair language as a starting point, we understand gender-fair language to be language which allows making men, women, and also non-binary people linguistically visible by explicitly marking all applicable genders of the referent(s). Thus, choosing to use gender-fair language means choosing a tool to reflect gender diversity, thereby enhancing gender equality (cf. Vervecken, 2013, p. 2).

In principle, gender-fair language comes into play once you want to refer to the function of a single person or a group of people without using the actual referents' names, as is for example common with job titles. As will be shown in Section 5.1, German allows reference to a group of male and female teachers with a masculine plural noun (Lehrer). However, this traditional language use has been said to lead to a male bias in the perceived gender of the person(s) referred to and to contribute to a stereotypical gender representation (cf. Pusch, 1984; Pusch, 1990; Trömel-Plötz, 1984; Kotthoff and Nübling, 2018), both notions that go back to the feminist movement of the 1970's (cf. Samel, 1995). Also, binary forms that refer to male and female referents alike are currently being criticized because they still exclude non-binary people (cf. Kotthoff and Nübling, 2018, p. 218). It is for these reasons that various forms of gender-fair language have been suggested in order to explicitly state the gender of the people denoted (cf. Section 5.1). The fact that in 2019 the cities of Hannover and Lübeck decided to use gender-fair language in official communication (cf. Hannover.de 2019; Hansestadt Lübeck, 2019) as well as the abundance of newspaper articles addressing the controversial subject (cf. Krüger, 2018; Rath, 2018; Steinfeld, 2019) clearly shows that the debate about the use or non-use of gender-fair language is gaining momentum in Germany. This development can mostly be observed regarding written German but spoken language use is also included in the debate (cf. Stephan, 2019).



Figure 1: Dictionary entry of a sign with three sign senses. The translations of authentic examples of sense 2 are marked in red. Clicking the play button of an example shows the original signed utterance in the video playback area. Context information that is not part of the signed utterance is surrounded by square brackets. The translation of the target sign is typed in bold letters.

3 The DGS-German dictionary

The DGS-German dictionary *Digitales Wörterbuch DGS* is a corpus-based electronic dictionary that uses authentic examples taken directly from the corpus of the DGS-Korpus project to illustrate the different senses of each lemma sign. Generally, each dictionary entry contains two signed examples for each dictionary sense, as shown in Figure 1. The source recording of an example can be viewed by selecting its play button. The signed utterances are translated into written German with the translation of the target sign typed in bold letters.

Since the examples are part of a longer monologue or dialogue but are shown in isolation in the dictionary entry, it is sometimes necessary to provide context information in order to enable the users to understand the examples. This context information may concern the perspective adopted by the signer during role shift, referents that have been introduced previously in the discourse and are now referred to with an index sign etc. . It is not part of the signer's shown utterance but paraphrased by members of the lexicographic team. German is used as a metalanguage to give this context information which can be found in square brackets at the beginning of the translation (see Langer et al. (2018) for a detailed description of the dictionary).

To summarize, when discussing gender-fair language in the lexicographic work of the DGS-Korpus project, we have to keep in mind that

- we are dealing with genuine examples with the original signer visible in the dictionary entry,
- the translations are not working translations, but edited material that is shown in isolation and, if necessary, completed with context information (metalinguistic elements), and
- we are dealing with oral (signed) utterances which are translated and presented in written form (see Koch and Oesterreicher (1986) for a general discussion on orality).

These aspects will be readdressed when discussing the challenges gender-fair language poses for our translations (cf. Section 6). But first we must evaluate the relevance this linguistic and societal phenomenon has when it comes to the DGS-German dictionary.

4 Relevance of gender-fair language for the lexicographic work of the DGS-Korpus project

The goal of the DGS-German dictionary is not to advocate for gender equality. Nevertheless, as a research project the DGS-Korpus project still has to take a stance on the matter of gender-fair language. The necessity to do so originates from the following facts:

- we are dealing with translations into a language (written German) whose community is having a lively debate on the use and non-use of gender-fair language, while
- we are facing the situation that DGS and German are structured differently regarding gender marking. DGS usually does not mark gender whereas German requires gender marking, as we will show later on (cf. Section 5). Hence, even without the question of gender-fair language we would have to deal with the question of gender marking in our translations. The debate on gender-fair language only adds an additional component to that question.
- As a research project we produce metalinguistic content concerning the signed utterances in which we refer to the function of single individuals

or of a group of people mentioned in our data (e.g. interpreters, teachers, etc. .). The discussion about gender-fair language revolves exactly around the very question which grammatical form should be used when naming referents' functions (e.g. job titles). As a consequence, it is imperative that we consider the debate on gender-fair language in our metalinguistic content.

Before turning to some hands-on examples from our lexicographic work, we will give an overview on how grammatical gender is expressed in our source and target language.

5 Expression of grammatical gender

5.1 Expression of gender in written German

German is an inflected language and German nouns, in contrast to English, are divided into three grammatical genders: masculine, feminine and neuter. Each noun in German comes with a definite and an indefinite determiner that agrees with the noun in gender. For singular nouns, the determiner is either *der* (definite)/*ein* (indefinite) for masculine words, *die/eine* for feminine words or *das/ein* for neuter words. Differently put, German requires to choose a determiner and a grammatical gender. This also holds true when talking about nouns and pronouns referring to a person. In this paper we are focusing on nouns only. In most cases, the grammatical gender of a noun referring to a person is associated with a person's gender.

Table 1 shows the different determiners which correspond to the nouns *Lehrer* (male teacher) and *Lehrerin* (female teacher). Note that while the definite determiner varies in singular forms according to the referents' gender, the definite

	Masculine	Feminine
Singular	-er ein Lehrer der Lehrer	+ suffix - <i>in</i> eine Lehrerin die Lehrerin
Plural	-er Lehrer die Lehrer	+ suffix <i>-innen</i> Lehrerinnen die Lehrerinnen

Table 1: Grammatical gender in written German (nouns and determiners). The male nouns and determiners are marked in blue, and the female ones in turquoise.

	Written form singular	Written form plural	Who is included?
(1) using both the masculine and feminine form	ein Lehrer/ eine Lehrerin	Lehrer und Lehrerinnen	Men, women
(2) adding a suffix to the masculine form	ein/e Lehrer/-in ein(e) Lehrer(in) einE LehrerIn	Lehrer/-innen Lehrer(innen) LehrerInnen	Men, women
	ein_e Lehrer_in ein*e Lehrer*in	Lehrer_innen Lehrer*innen	Men, women, non-binary people
(3) gerund	eine lehrende Person (someone who teaches)	Lehrende (those who teach)	Men, women, non-binary people

Table 2: Forms of gender-fair language in written German. The male nouns and determiners are marked in blue, the female ones in turquoise and the neutral ones in orange.

determiner *die* is used for masculine and feminine forms alike once a plural form is employed. In addition to that, Table 1 illustrates that the suffix *-in* or *-innen* is added to the masculine form of the noun in order to refer to a female teacher or to several female teachers respectively. In German the generic masculine applies when the gender of a referent (single or group) is not specified or the group is of mixed gender. In other words, referring to a group of male, female, and nonbinary teachers with the masculine form *Lehrer* alone is grammatically correct. However, as mentioned in Section 2, the generic masculine as a default characteristic has been criticized as it hides the presence of women and non-binary people, leading to societal consequences (cf. Kotthoff and Nübling, 2018). As a consequence, various forms of gender-fair language have been and are still being developed. Table 2 provides a non-extensive overview of these forms as well as the degree of their inclusiveness.

In this project note we cannot offer an in-depth description of the numerous pro and con arguments that have been put forward for each of the gender-fair forms in Table 2. Interested readers are invited to consult Usinger (2020) and AG Feministisch Sprachhandeln (2015) for that matter.

For the purpose of this paper, we conclude that

- · German, our target language, requires gender marking, and
- that the generic masculine, which is often utilized to meet that need, is a controversial choice.
- At the same time there are many different forms of gender-fair language, but there is not yet an established one, which we could easily adopt.

5.2 Expression of gender in DGS

To our knowledge there exists very little research regarding the expression of gender marking in DGS. Performing a (non-exhaustive) search for explicit gender markers in the DGS Corpus, we identified the following approaches: Through mouthing or through explicit manual gender marking by using either a morpheme that conveys the concept "female" (Section 5.2.1) or by using the signs MAN and WOMAN following or preceding a sign (Section 5.2.2).

To identify these markers, we searched the corpus for female suffixes (-in, *-innen*) in the mouthings and German translations and in addition spot-checked the transcribed data, especially those instances in which the participants referred to job titles, (e.g. sign language interpreters, teachers, doctors) and to a group of people (e.g. inhabitants). This choice was made based on the assumption that these referents would appear often in the data: the informants typically discuss their experience at school, with medical staff as well as with interpreters. Another reason for the choice of referents was that they exhibit different gender distributions. For example, sign language interpreters in Germany are often female, so we would expect that if gender were marked systematically in DGS, statements about interpreters would exhibit such markings. Inhabitants, on the other hand, represent a group that typically consists of people of all genders. The general impression was that DGS does not systematically mark gender: most of the time, a sign such as INTERPRETER⁴ was used without manually specifying the gender of the referent.⁵ Gender is not often marked by mouthing either. It has to be kept in mind that the suffix -*in* used in German female nouns is difficult to observe. Also,

⁴INTERPRETER is a collection of signs that are mostly synonymous. It covers the following types from the Public DGS Corpus (Konrad et al., 2020): INTERPRETER1, INTERPRETER2, INTERPRETER3A, INTERPRETER3B.

⁵Further research might use the signs for referents exercising certain jobs such as interpreters, doctors, etc. as a starting point for a study focusing on gender marking. Thus, it would be possible to contextualize these findings, e. g. to state how many times a certain sign occurs in the corpus and how many of these occurrences are specified for gender.



Figure 2: Morpheme "female"

in the DGS Corpus the mouthed German word that accompanies a DGS sign is oftentimes not fully articulated, leaving open the question whether a male or female form is applied. Therefore, mouthing is not a clear indicator for gender marking. The impression that gender is not often marked by mouthing was verified by Weigand (2020) who states that mouthings dominantly reveal the male form of a noun. Female signers and signers age 46 and upwards sometimes seem to exceptionally mark a female referent's gender via mouthing (cf. Weigand, 2020, p. 31). Also, there might be a tendency to use a female form in mouthing when the respective referent is known to the signer (cf. Weigand, 2020, p. 23). However, as the author states herself, the analyzed data is not sufficient in quantity to provide conclusive evidence and further research is needed to definitely determine the role mouthing plays when it comes to gender marking (cf. Weigand, 2020, p. 31).

Concerning explicit gender marking by manual activity our results indicate that in very rare cases DGS signers do mark gender. For these cases, we found two different markings which will be presented in the following Sections 5.2.1 and 5.2.2, respectively.

5.2.1 Encoding gender morphologically by adding a morpheme to the sign

In DGS there is a morpheme that conveys the concept "female" when added to a sign denoting a person.⁶ It is shown in Figure 2.

The transcribed data of the DGS Corpus up until April 2019 contained 11 occurrences of this morpheme uttered by 5 female and 3 male signers ages 46 and upwards. As shown in Figure 3, these occurrences can mostly be traced back to signers living in Saxony (eastern Germany). Compared to the overall corpus size of approximately 550,000 tokens at the time (April 2019), 11 occurrences are a negligible number that does not point to a systematic use of the morpheme as an

⁶Type as in the Public DGS Corpus (Konrad et al., 2020): \$MORPH-FEMALE1.



The map displayed is based on data under German federal government copyright: © GeoBasis-DE / BKG 2013 (data modified).

Figure 3: Use of morphological gender marking as annotated in the DGS corpus

indicator for gender in DGS.

In order to reinforce our findings, we would like to add some additional numbers that reflect the current corpus data (July 2020). At this point, there are a total of 625,061 annotated tokens in the DGS Corpus. Lexemes in iLex have been mapped with 'supersense' categories (cf. Langer and Schulder, 2020), which are coarse semantic groupings provided by GermaNet Hamp and Feldweg, 1997. According to this mapping, 383 lexemes with corpus tokens belong to the supersense category 'Mensch' (human) and can therefore be considered lexemes that denote people. These 383 lexemes contain 9361 tokens, which could theoretically be marked for gender by using the morpheme that conveys the concept "female". Since our analysis tells us that this morpheme occurs only 12 times in the annotated corpus, it apparently is not used often for gender marking.⁷

⁷One should note that the mapping is rather rough and error-prone, and that not all potentially person-denoting lexemes might be found by the mapping and that not all tokens within the mapped lexemes actually denote persons. They can have other contextual meanings such as naming activities.

5.2.2 Encoding gender lexically by using the sign WOMAN or MAN following or preceding a sign

Another possibility for gender marking in DGS is to use the sign WOMAN⁸ or MAN⁹ following or preceding a sign that denotes a referent in order to specify the person's gender. In Example $(1)^{10}$, the signer makes use of the sign WOMAN accompanied by the mouthing "*frau*" (German for *woman*) in order to state that the person referred to is a master craftswoman, not a master craftsman:

(1) PERSON IX_{PERSON} MASTER IX_{PERSON} WOMAN IX_{PERSON} "The master craftswoman [...]." "Die Meisterin [...]."

The corpus was searched for this use of the signs WOMAN and MAN by using a query that showed all occurrences of these target signs and the signs in close proximity, meaning two positions before and after the target signs. While we would have liked to include an analysis of signs meaning "non-binary", no instances of such signs were annotated in the DGS Corpus at the time. Therefore our analysis was limited to the use of the signs WOMAN and MAN. Those occurrences of the signs WOMAN and MAN that did appear in close proximity to a sign denoting a person or a group of people were interpreted as lexical gender marking.

The results show that such a gender specification using any phonological or lexical variant of the sign WOMAN appears 18 times in the data and is used by 16 signers (8 female and 8 male). Similarly, 13 occurrences of any variant of the sign MAN by 10 signers (7 female and 3 male) specify a male referent's gender. As can be seen in Figures 4a and 4b, the signers who use this form of gender marking are scattered throughout Germany, unlike those who use the female morpheme sign (cf. Section 5.2.1, Figure 3).

⁸WOMAN is a collection of signs that are mostly synonymous. It covers the following types from the Public DGS Corpus (Konrad et al., 2020): WOMAN1A, WOMAN1B, WOMAN2A, WOMAN2B, WOMAN2C, WOMAN2D, WOMAN3A, WOMAN3C, WOMAN4A, WOMAN4B, WOMAN5, WOMAN6, WOMAN7, WOMAN8, WOMAN10.

⁹MAN is a collection of signs that are mostly synonymous. It covers the following types from the Public DGS Corpus (Konrad et al., 2020): MAN1, MAN2, MAN3A, MAN3B, MAN4, MAN5B, MAN6, MAN7A, MAN7B, MAN8, MAN9, MAN10, MAN11.

¹⁰The example can be seen in the Public DGS Corpus (Konrad et al., 2020): fra_06: Experience of Deaf Individuals, 00:08:18:15-00:08:19:48. Glosses were adjusted to improve readability.



The maps displayed are based on data under German federal government copyright: © GeoBasis-DE / BKG 2013 (data modified).

Figure 4: Use of lexical gender marking using the sign WOMAN or MAN

5.2.3 Summary: Expression of gender in DGS

Our observations suggest that DGS does not mark gender often. Even though there are morphological and lexical ways in which a referent's gender can be specified as male or female, our analysis demonstrates that these gender markings appear only occasionally. The data suggests that the morphological marking might mostly be used by elderly signers in a certain region of Germany. Regarding lexical gender marking, it does not seem to be specific for a certain region, since the few signers who lexically specified a referent's gender live in different parts of Germany. However, the small sample size for morphological and lexical markings means that these observations on regional and age distribution are tentative at best.

The low frequency of gender marking in the DGS Corpus suggests that DGS does not systematically mark gender. This observation has also been confirmed by our deaf colleagues. They also drew our attention to the fact that gender might be conveyed by certain types of constructed actions, a factor we could not take into account due to time constraints. Also, it has to be kept in mind that the data in the DGS Corpus was recorded from 2010 to 2012 and might not reflect recent language developments.

While our analysis presents a starting point regarding the question of how

gender is or is not marked in DGS, a more thorough systematic investigation is still required to make authoritative claims on the matter. We would also like to emphasize that the collaboration with native signers of DGS is indispensable to the success of such research.

Now that we have established how differently German and DGS mark gender, we will turn to the challenges that these differences entail when it comes to translating between these languages.

6 Challenges

In this section we will describe the challenges we are facing when translating utterances from DGS, a language that does not seem to mark gender often (cf. Section 5.2), to written German, a language that requires gender marking (cf. Section 5.1), in a systematic way using specific examples from the corpus. Section 6.1 will establish the relevance of balancing speaker's authenticity with the societal impact of the resource. Section 6.2 outlines the different cases that may be encountered by translators. These cases are outlined in Section 6.2.1 through Section 6.2.4. A discussion of relevant metalinguistic elements is provided in Section 6.3. Here we focus on context information that needs to be given in the dictionary entries in order to introduce the shown examples.

To recall: The DGS Corpus consists of informal, oral utterances stemming from face-to-face communication. These oral utterances are used as authentic examples in a DGS-German dictionary and therefore have to be translated into written German. Here, we are facing challenges concerning the different ways of gender marking that are used in our working languages (cf. Section 5). These challenges are also relevant for any translation from a language not marking gender (e. g. English) to one marking it (e. g. French). On top of that, we have demonstrated that the discussion about gender-fair language has to be taken into account when doing lexicographic work (cf. Section 4).

6.1 Speaker's authenticity vs. impact

The most important challenge that will be encountered repeatedly in the course of this paper lies in balancing two aspects: speaker's authenticity on the one hand and the impact our translations have on the other hand. Schulz et al. (1996, p. 537) define authentic as "the actual original content meant by the author, composer at the time of creation, reproducing character, faithful to the original, text and work". Concerning the translations of authentic examples for our dictionary, this implies that we need to be true to the signer's age, register, etc. This being said, it is necessary to mention that according to our deaf colleagues the topic of gender-fair

language is not much discussed in the Deaf community. Hence, we have to ask ourselves on the one hand whether or not it is authentic to translate a signed utterance into German using gender-fair language, keeping in mind that a part of the population considers gender-fair language as marked and as representing a political statement. On the other hand, our decision in favor of or against genderfair language will impact the way the translations are perceived, because in some way using gender-fair language is becoming more prevalent, especially in the academic context. We therefore have to acknowledge that both embracing or refusing gender-fair language will reflect upon the signers in our corpus, upon the Deaf-/Signing community, and upon the DGS-Korpus project and the dictionary itself. Keeping these central aspects in mind we will now turn to some examples taken from the corpus.

6.2 Case examples

Basically, there are two categories that pose different problems in terms of a gender-fair translation (and even in terms of a gender-correct translation): either the referent's gender is known to the signer or it is unknown. Both categories will be discussed and illustrated with translations employing both a singular and a plural form in German (cases A - D). An overview of the examples is given in Table 3.

Category 1	Gender known to the signer	Singular	Case A
		Plural	Case B
Category 2	Gender unknown to the signer	Singular	Case C
		Plural	Case D

 Table 3: Categories to be analyzed.

6.2.1 Case A: Gender known, singular

Starting with category 1 "Gender known to the signer", we will now focus on case A (singular) in which the signer refers to her teacher. Example $(2)^{11}$ shows the signed utterance transcribed as glosses and with mouthings in German, an English translation and possible translations in German. Translations of the target sign TEACHER are marked in bold. Color-coding of the German translations of the target sign highlights which parts are gendered male (blue), female (turquoise) or neutral (orange). As can be deduced from the glosses, the referent's gender is not encoded linguistically in the source utterance. The context does not give any information in this regard either. The color-coding illustrates that Translation (2b) uses the masculine form of the word *Lehrer* and (2b') the feminine form. Translations (2c) to (2e) show different options for gender-fair translations.

	dann schule	lehrer	[MG]
(2)	THEN SCHOOL TO-PLACE	TEACHER	$FO-LET-KNOW\ \overline{TO-TELL}\ TO-LIST\ ALL\ I\ GEST:_{LISTEN}$
(2a)	"The next day, our teacher at scho	ool explained t	o us what had happened and I listened."
(2b)	"Am nächsten Tag in der Schule e	rzählte <i>der Lel</i>	urer noch mal genau, was passiert war und ich hörte zu."
(2b')		die Leh	rerin
(2c)		der*die	Lehrer*in
(2d)		der*die	Lehrende
(2e)		die Leh	rkraft

Here the gap between the signer's and our knowledge of the teacher's gender is the source of our difficulties. If we decide to choose the masculine form (2b) in the translation, our choice might not reflect what the signer means gender-wise. The teacher might be female and consequently our translation might be wrong. The reverse might be the case if we choose the female form (2b'). Moreover, since the signer knows her teacher's gender, using (2c) as a translation might be confusing for the readers. The confusion may be due to the fact that the readers do not know whether the signer or the translator used the gender-fair form or whether the referent is actually non-binary, which we still can't tell without more context information. Generally, the question of authenticity arises when translating a signed utterance using an asterisk and a doubled determiner as would be required in (2c). Also, readability might be a factor to consider. The usage of not yet established forms of gender-fair language in written German (e.g. asterisk and underscore) might have a negative impact on the readability of the translations. This is also an important aspect regarding the usability of the dictionary, especially since (written) German is a foreign language for parts of the user group. At first glance it therefore seems promising to opt for a gender-neutral version of the noun "teacher" (2d) – the resulting translation would definitely be correct

¹¹The example can be seen in the Public DGS Corpus (Konrad et al., 2020): sh_02: Experience Report, 00:02:08:11-00:02:10:42, Glosses were adjusted to improve readability.

gender-wise and also authentic to the DGS utterance which does not mark gender either. However, even if we decide to use a gender-neutral noun (gerund), its singular form still requires a definite determiner which is either masculine or feminine and leaves us with the same issues as described for (2c). In the case of *Lehrer* there happens to be a gender-neutral form whose definite article does not refer to the gender of the referent: *Lehrkraft* (2e). However, very few nouns have a corresponding gender-neutral form, so this solution does not generalize very well.

Overall we find that none of the proposed translations are both satisfying and generalizable.

6.2.2 Case B: Gender known, plural

Staying in the same category 1 "Gender known", we will now move on to a plural form (case B). Example $(3)^{12}$ shows a female signer telling her interview partner about meetings of elderly people at the local deaf club. The target sign is ELDERLY.

```
[MG] monat
       hier bremen
                                                sechzig bis
                                                                 achtzig senioren
                                                                                        treffen
(3) HERE BREMEN REGULARLY MONTH NUM: SIXTY TO NUM: EIGHTY ELDERLY TO-MEET
(3a) "Here in Bremen, 60 to 80 elderly people come to our monthly meetings."
(3b) "Hier in Bremen treffen sich bei unserem monatlichen Treffen regelmäßig 60 bis 80 Senioren."
(3b')
                                                                            Seniorinnen
(3c)
                                                                            Seniorinnen und Senioren
(3d)
                                                                            Senior*innen
(3e)
                                                                           *Seniorende
```

Again, the DGS utterance does not mark the referents' genders, but we might assume that people of all gender attend the meetings. Considering that the female signer is part of the group, using the generic masculine (3b) is grammatically correct, but not in line with gender-fair language. This issue could easily be resolved by making use of a binary form marking male and female participants alike (3c). However, the question remains whether or not such a binary form is a correct translation as it does not include non-binary people and also as it is possible that only women take part in the activities. For reasons of authenticity, (3d) is also a debatable choice, even though slightly less problematic than in case A due to the fact that the plural form does not require a definite determiner. Again, we might like to turn to a gender-neutral form as in case A. But in German there is no gerund form for the noun "Senior", resulting in (3e) being ungrammatical.

Cases A and B have allowed us to demonstrate that examples in which the signer knows the referent's gender confront us not only with the question of authenticity and gender-fair language, but also with possible faults in our translations.

¹²The example can be seen in the Public DGS Corpus (Konrad et al., 2020): hb_05: Free Conversation, 00:06:50:21-00:06:57:48, Glosses were adjusted to improve readability.

6.2.3 Case C: Gender unknown, singular

In the following cases C and D we focus on our second category: signs referring to someone unknown to the signer. In Example $(4)^{13}$ the signer makes reference to the possibility of hiring an interpreter. Hence, the target sign INTERPRETER is to be translated using a singular form in German (Case C). Again, different options are at our disposal:

	einfach	dolmetscher
(4)	THEN JUST IN	FERPRETER TOGETHER-PERSON
(4a)	"Then you just hi	re an interpreter ."
(4b)	"Dann kann man	einfach einen Dolmetscher hinzuziehen."
(4b')		eine Dolmetscherin
(4c)		einen Dolmetscher oder eine Dolmetscherin
(4d)		eine*n Dolmetscher*in
(4e)		eine dolmetschende Person

This example neatly shows that case C is a case in which the target sign is not used to refer to a specific person with a specific gender, but to anyone who performs a certain role or job denoted by the target sign. We might assume that the interpreter's gender is most likely not relevant to the utterance of the signer because the signer refers to anyone who has obtained a license in interpreting. If that is the case, we could either opt for the generic masculine (4b), following the argument that a generic form is exactly what is required when the referent's gender is not of importance. This option would of course not be in line with the idea of gender-fair language. Or we could reason that if the signer does not refer to a specific gender, people of all genders are meant and therefore (4d) would be appropriate. This again brings up the issue of the two determiners separated by an asterisk and the issues of authenticity and readability. If we decide it is important to us as a project to mark gender and if we decide to do so by using binary forms, the term "male or female interpreter" (4c) might be appropriate. Lastly, a gerund form (4e) meaning "a person who translates" might be the smoothest solution gender-wise, but is a very uncommon singular form in German and might spark irritation among the users of the dictionary.

¹³The example can be seen in the Public DGS Corpus (Konrad et al., 2020): koe_22: Experience of Deaf Individuals, 00:10:22:25-00:10:24:09, Glosses were adjusted to improve readability.

6.2.4 Case D: Gender unknown, plural

In order to complete our discussion of all four cases, we will now briefly turn to an example representative of plural forms referring to referents unknown to the signer. In the case of Example $(5)^{14}$ the target sign is INHABITANT, referring to the inhabitants of the city Ludwigshafen:

```
    (5) heute ludwigshafen mit stadtteil [MG] etwa hundertsechzigtausend in the provided statter in the provided stat
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This is the most straight-forward example discussed so far: a generic group such as inhabitants is most likely made up of people of all genders. This either calls for the use of the generic masculine (5b) or for a gender-sensitive approach. Regarding the latter, if we were to opt for a binary representation in language, (5c) is probably an adequate translation. At the same time, this case shows that using a gender-fair expression including an asterisk (5d) could easily be used in plural cases with unknown referents: determiners are unnecessary, and therefore (5d) is even shorter than (5c). However, the issues of authenticity and readability remain.

6.3 Metalinguistic elements

Having considered the question of gender-fair language in the translation of authentic examples in a systematic way, we will now turn to another element of the dictionary: the metalinguistic context mentioned in Section 4.

For some entries in the dictionary, context information needs to be given in order to introduce the shown example and in order to make it easier to understand its meaning. Hence, the information is not part of the translation. Instead, we are dealing with metalinguistic elements detached from the signers in the DGS Corpus, making it unnecessary to worry about authenticity to the signer in our translations. Still, the question of gender-fair language comes into play at this point, as illustrated in Figure 5. In this example taken from the dictionary, the informant is talking about the benefits of winning a beauty contest. The contest in question is for women only, therefore the noun *Gewinnerin* (female winner) is part of the context information in square brackets.

But if the beauty competition had explicitly or potentially called for applicants of all genders, we would be confronted with the question of how to refer to the

¹⁴The example can be seen in the Public DGS Corpus (Konrad et al., 2020): fra_13: Regional Specialities, 00:12:56:42-00:13:05:19, Glosses were adjusted to improve readability.

BEISPIELE ● [Als Gewinnerin] eines internationalen Schönheitswettbewerbs hat man gute Chancen auf ein Schauspielstudium.] Außerdem ist man von den Studiengebühren befreit. ● [Thema: Arbeitslose] Die tun mir schon leid, aber Hartz-IV-Empfänger haben den Vorteil, dass sie von der Miete befreit sind.

Figure 5: Example sentences from the DW-DGS. In the first example the informant is talking about the benefits of winning a beauty contest. The contest in question is for women only, therefore the noun Gewinnerin (female winner) appears in the context information in square brackets.

winner. The same applies to examples which require that the context mentions teachers, interpreters, doctors, etc. . At this point it is necessary to make a decision on whether or not gender-fair language should be used in metalinguistic comments of the research project. Moreover, if a gender-fair approach is adopted, it has to be decided which form of gender-fair language should be employed.

7 Summary

To conclude, it cannot be denied that the discussion on gender-fair language in (written) German has caused academic and official institutions to change their language use in favor of a more gender-fair approach. Moreover, public discussions on gender equality and on gender-fair language are increasing in number and intensity. Regardless of the fact that the DGS-Korpus project does not pursue political ambitions, it has to consider the matter of gender-fair language as it uses written German as a target language in the translation of authentic examples for the DGS-German dictionary as well as in metalinguistic content that the research project produces itself. The translations are written translations of oral (informal) utterances expressed in DGS, a language that does not seem to mark gender often as we were able to show in the scope of a preliminary investigation of the DGS Corpus.

The challenges arising from this are grammatical, ideological, and practical in nature. A systematic discussion of different cases in which the signer knows or does not know the referent that they referred to revealed that the signer knowing the referent's gender renders the translation problem more complex, as the signer's knowledge was not always inferable for the translator. Also, plural forms pose fewer difficulties regarding gender-fair and gender-correct translations while translating a sign referring to a single individual creates a more challenging situation, sometimes making it even impossible to tell whether our translations are correct gender-wise. Another factor to consider is the possible impact of genderfair language on the readability of the dictionary entries. User friendliness plays

a role when thinking about the language use of the intended user groups of the dictionary, e. g. people whose first language is not German. Gender-fair language might decrease readability for this user group.

To summarize, the challenges dealt with in this paper can be seen as a balancing act between authenticity to the signer and the impact the use or non-use of gender-fair language will have on the users of the dictionary. Possible solutions will consist of a tradeoff between political correctness and source-text oriented translations. Political correctness includes of course not only the question whether gender-fair language should be used, but also which form should be employed, i. e. a decision on who will be made visible by the translations.

Considering the rather complex nature of the topic discussed, we would like to point out that in our opinion, transparency concerning the decision for or against gender-fair language is of utmost importance. The arguments on which that decision is based should be made accessible for potential dictionary users and should therefore be summarized in the front matter of the dictionary as well as on the website of the DGS-Korpus project. This enables the users to engage in the discussion and to contribute their own points of view. Also, authentic examples without linguistic or contextual gender marking should be marked as not having an explicit gender marking, thus making the dictionary users aware of the fact that the gender marking in the translation is based on the researcher's decision concerning gender-fair language, rather than the signer's utterance. Last but not least, the dictionary users should have the possibility to give feedback on the project's decision and to contribute to the discussion on translation and gender-fair language.

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