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Ideologies behind the scoring of factors to rate sign language vitality

Special Issue on Ideologies in Sign Language Vitality and Revitalisation

Language & Communication

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Highlights

- Framing sign languages within common endangerment ideologies is problematic
- Academic perceptions of 'language' often differ from the beliefs of language communities
- Vitality assessments do not sufficiently gather sign language communities' own perspectives

Abstract

This article examines ideologies underlying the rating of sign language vitality. The discussion is based on a 2011 survey by UNESCO and the International Institute for Sign Languages and Deaf Studies, and a newer survey by UNESCO, released in 2018. Ideologies of biodiversity and culture that appear in discourse about language vitality generally are examined. Three of the factors used to determine the vitality scores of 15 sign languages during the first survey (Safar & Webster, 2014; Webster & Safar, 2019) are considered from an ideological perspective. Further ideological issues that surfaced during this survey are then explored through a case study on endangered village sign languages in Mexico. Lastly, some ideological aspects of UNESCO's 2018 survey are scrutinised, including its accessibility to deaf signers, emphasis on hierarchical globalist structures, and presentation of sign languages as bounded entities that fit into binary categories. We find problems with framing sign languages within endangerment ideologies and relying on academic perceptions of 'language' that differ from the beliefs of language communities themselves. These vitality surveys provide a starting point for more robust mixed-methods assessments, which should take more account of sign language communities' own perspectives.

Keywords

Sign languages; language vitality; language ideologies; UNESCO; language vitality assessment; village sign languages

1. Introduction

What is it that makes a language community refer to their signing variety as a separate language? How can we decide whether a specific signing variety is a language or a dialect? Does the survey ask for data only from linguists, or also from government institutions and deaf associations? Should we include support for sign languages outside legislative and educational policies, e.g. at churches? How much should we take into account non-governmental, grassroots policies? How can we show the differences between signers' attitudes and stakeholders' attitudes? For use of the sign language within education, should we refer to the official legislation or the real situation? What does it mean for a language or communicative behaviour to be 'tolerated'?

(Sample of respondents' questions about the adapted survey on sign language vitality, UNESCO & iSLanDS, 2011)

The designation of numerical scores to selected aspects of a language to determine a rating for its vitality is influenced by a range of language ideologies (e.g. Baker, 1992; Blommaert, 1999; Duchêne & Heller, 2008). Language ideologies are the beliefs that underpin how people interact, communicate, and assess linguistic activity. These ideologies include beliefs about the superiority and inferiority of individual languages, and about the linguistic status of sign languages and gesture (Kroskrity, 2004). *Ideologies* can be described as 'system[s] of widely shared ideas, patterned beliefs, guiding norms and values, and ideals accepted as truth by a particular group of people' (Steger, 2003: 93). *Language ideologies* have been defined as 'underlying, unexpressed, subconscious ideas about language' including the usage, value, origins, rationalisations, justifications and future trajectory of language (Jourdan & Angeli, 2014: 266-267; see also Silverstein, 1979; Schneider, 2018).

Language ideologies have become more salient as linguists have departed from the 20th-century tendency to envisage languages as bounded entities (e.g. Bloomfield, 1933; Chomsky, 1957). A more central position is given to ideologies within the 21st-century focus on function, meaning and pragmatics, and concepts that challenge the presumed boundedness of languages, such as multimodality and translanguaging (e.g. Kroskrity, 2004; Garrett, 2010; Kusters et al., 2017; De Meulder et al., 2019). But so far, the literature on ideologies surrounding language vitality mainly focuses on spoken languages, and is almost non-existent when it comes to sign languages.

UNESCO's 2003 endangered languages survey 'Language vitality and endangerment' targeted spoken languages, and was created by an international group of linguists to assess the degree of endangerment of specific languages (UNESCO Ad Hoc Expert Group on Endangered Languages, 2003). The 2003 survey was the basis for an adapted survey for sign languages in 2011 (UNESCO &

iSLanDS, 2011; Webster & Safar, 2019). In 2018, UNESCO released a sign language survey alongside a spoken language survey for the first time. Heller and Duchêne (2008: 3-4) note that UNESCO is especially influential in generating discourse on language endangerment but the authors do not necessarily accept the picture of language endangerment presented by UNESCO or other international bodies:

We aren't sure there are 6,000 languages in the world; we aren't even sure how you can count languages. We are curious about what it means to say a language 'dies' or 'disappears': what happened to change? [...] Who stands to gain or lose what by the production or reproduction of ideological complexes around language endangerment? In whose interest is it to promote or contest such discourses?

Moreover, Skutnabb-Kangas and Phillipson (2010) question what UNESCO is achieving in its work to list and document endangered languages if they are not also attempting to address the factors that are making them endangered.

This paper turns a critical eye toward the assumptions supporting UNESCO-related discourse in this area and reflects on the ideologies involved in scoring vitality of sign languages. For example, language surveys often ask for specific numbers of users, even though this information is extremely difficult to obtain for sign languages.

In analysing language ideologies, scholars have taken a variety of positions on the clarity of, and availability of evidence to support, our ideological understandings (Gal, 1998). In particular, some scholars find evidence for ideologies in the material world, while others see ideological evidence as conceptual only (ibid). We assume that it is possible to find material evidence for language ideologies. This means that for example the questions included (and not included) in a language survey provide material evidence of the language ideologies held by the organisation that generated the survey.

Section 2 of this paper explores two common ideologies found in language endangerment discourse generally: *languages as biological species*, and *language as a cultural edifice*. Both of these portrayals are connected to the idea that speakers have the right to defend and preserve their languages (Heller & Duchêne, 2008). But each portrayal to differing extents has the effect of centralising the language itself and de-prioritising or marginalising the user community. This happens for instance when governments 'recognise' a particular language without actually facilitating the language rights of its user community, especially language acquisition rights, which are essential to deaf communities because so few deaf people have parents who sign (De Meulder, Murray & McKee, 2019). Section 3 briefly describes the scoring process¹ used for the adapted survey by UNESCO and iSLanDS (2011). Some of the ideological perspectives that stood behind the survey are considered in section 4, through a case study of Yucatec Maya Sign Languages (YMSLs) in Mexico. Section 5 looks at three of the factors used in the scoring process, which are given a value and combined to determine an average overall vitality rating for a particular language.² Ideological

¹ The scoring committee worked together from 2011 to 2014 to rate 15 sign languages in the first attempt to place sign languages on UNESCO's atlas of endangered languages. The members were Kang-Suk Byun, Nick Palfreyman, Cesar Ernesto Escobedo Delgado, Anastasia Bradford, Josefina Safar, Jenny Webster, and Ulrike Zeshan, who also led the adaptation of the UNESCO survey in 2011 to make it suitable for sign languages.

² It is difficult to provide a full picture of the 2011 survey and scoring process in this paper due to space limitations; however, the reader may refer to Webster and Safar (2019) where the procedure and results are described more comprehensively.

aspects of UNESCO's 2018 questionnaire are explored in section 6, and a conclusion is offered in section 7.

2. Two ideologies underpinning the measurement of language vitality

In this section, we discuss two of the ideologies that are commonly found in discourses of language endangerment. Because of 'modality chauvinism' (Braithwaite, 2019: 161), the literature on language endangerment ideologies so far, including the two explored in this section, has focussed almost exclusively on spoken languages.

Biodiversity has been largely established as the 'conceptual frame' for discussing endangered languages (Muehlmann, 2008: 14), and was applied to language endangerment as early as 1972 with Haugen's concept of 'language ecology' (Haugen, 1972). This framework is so entrenched with language vitality that it is difficult to discuss the two separately, so the 'biodiversity' rhetoric inevitably appears within this paper (e.g. 'threatened', 'endangered', 'extinct'). The comparison between biodiversity and linguistic diversity came about at a time when environmentalism was newly fashionable, and was promoted to generate interest in the decreasing number of 'living languages' on earth (Maffi, 2005: 602; Muehlmann, 2008: 16-17). Cameron (2008) argues that much of this discourse seems to be aligned with an ideology of nationalist 'organicism', using the metaphor 'languages are biological species'. For example, the political discourse about minority languages in Mexico portrays them as 'multicultural and multilingual wealth' that 'characterises our nation' (PINALI, 2009: 41, translation ours), in a similar way to how Mexico's animal and plant species define the character of the natural environment. Another reason for framing linguistic diversity as biodiversity is that areas 'most of the world's mega-biodiversity is in areas under the management or guardianship of indigenous peoples', whose communities are often the ones using small-scale, endangered languages (Skutnabb-Kangas & Phillipson, 2010: 88).

The 'diversity' rhetoric within environmentalism and linguistics that became widespread in the 1980s and 1990s provided a foundation for 'the representation of an apparently globalised, common interest' (Muehlmann, 2008: 23). In this rhetoric, 'incursions' on languages are portrayed as 'virus-like attacks' that 'undermine their health' (Heller & Duchêne, 2008: 4). This ideology presents linguistic diversity as a good in itself, so that the emphasis is placed not on equality or actualisation for the user community, but on protecting diversity (Cameron, 2008). According to May (2011), the biodiversity framework lacks sufficient consideration of political power structures and minority language rights, and 'actually reinforces, albeit unwittingly, the inevitability of the evolutionary change that it is protesting about' (May, 2011: 3-4).

The 'scientific' approach to endangered languages sometimes promotes this conceptual frame of biodiversity in part because comparing all languages against one scale is much easier if languages are seen as diverse but equal species to which we can apply the same factors. The attempt to be 'inclusive' of all languages in the axiomatic belief that they make up something like 'the whole of our human diversity' could perhaps be compared to a belief that 'inclusion' and 'equality' in education means treating all learners the same. Endangered languages must be examined on an individual basis much more sensitively than they have been so far in order to come to accurate conclusions about their vitality. Each language exists in a different nation state with a different set of cultural values, differential access to resources and power, different understandings of minority rights, and different legal frameworks for linguistic rights. It has sometimes been noted that sign languages have a special resilience that is not found for endangered spoken languages, due in part to signers'

‘collectively-held explanations’ of the importance of sustaining their language (Padden, 2001: 106). However, this argument can also be questioned, given the fact that deaf children rarely have the chance to learn a sign language from fluent adult signers.

Another ideology is that a people’s language ‘stands for the entire edifice of their culture, their history, and their accumulated knowledge’, so that when the language is lost, the culture is lost’ (Cameron, 2008: 275; Walsh, 2010). According to this view, languages are valuable to their communities as symbols of identity and storehouses of history, and are sometimes the only means of tracing their community’s past (Anderson, 2011). Hualand (2009: 100) describes sign languages as ‘carriers of regional and national cultures and heritages in the same way spoken languages are’ and notes that they also ‘carry [...] the culture and heritage of deaf people’. The idea that a language is the edifice of a culture can be seen as a ‘preservationist argument’ that portrays a natural connection between a community and a language that conveys its cultural beliefs (Cameron, 2008: 280). This is often associated with an ideology of ownership, the notion that a certain group of people own the language and retain the right to qualitatively judge it. These native speakers are the true authorities, and non-native speakers are less able to attain knowledge and competence (e.g. Sharrock, 1974; Davies, 1991). But ‘native speaker’ means something different in the case of spoken indigenous languages versus sign languages, because most deaf children have non-signing parents (e.g. Padden & Humphries, 2006). Under an ideology of ownership, deaf people are the true authorities on sign languages (Eichmann, 2009), because these languages are based on the sensory experiences of deaf people (Murray, 2020). Weber (2020) argues that deaf people have a moral duty to promote the status of sign languages.

Language minorities often perceive their languages as repositories of cultural knowledge that need to be saved from obsolescence (Collins, 1998; Kroskrity, 2004), and this is especially the case for deaf communities, whose visual culture is based on sign languages (Ladd, 2003). The death of a language is said to result in ‘a collective loss of knowledge about the world’ because the structure of the language encodes its cultural wisdom (Heller & Duchêne, 2008: 2). The community’s way of perceiving their language may differ substantially from the way in which linguists see it (Albury, 2015), e.g. as being characterised primarily by certain grammatical, phonological, typological or structural patterns (Collins, 1998; Kroskrity, 2004). Collins (1998: 350, 359) presents this as a contrast between ‘grammatical regularity versus lexical particularity’, and between the ‘etic’ ideologies of linguists versus the ‘emic’ ideologies of language communities. This dichotomy perhaps reflects a tension between the ‘edifice of culture’ ideology and the ‘biological species’ ideology. Debates about minority communities’ rights are frequently wrapped in the ‘diversity’ discourse that renders the languages of indigenous people as just one part of an ‘ecological balance’ (Heller & Duchêne, 2008: 5). The discourse of diversity and ecology may be an instantiation of globalist ideologies. A re-assertion of the value of language as the edifice of a specific culture might be seen as a ‘modernist reaction’ to globalisation (ibid: 11). In the context of globalised neoliberalism, the notion of ‘hybridity’ has flourished and also conflicts with modernism (Kubota, 2014). Hybridity ‘regards multilingual linguistic practices as products of language users’ multiple repertoires’, which they may use flexibly according to the situation to meet their communicative responsibilities as individuals (ibid: 476). Kubota (2014) argues that this entrenches existing privilege and supports the hegemony of standard languages such as English.

3. Scoring process for the 2011 adapted survey by UNESCO and iSLanDS

The adapted survey (UNESCO & iSLanDS, 2011) resulted from research into sign language vitality at iSLanDS that began with a 2009 investigation into a range of small-scale sign languages in ‘deaf villages’ (Zeshan & de Vos, 2012). This led to a collaboration between iSLanDS and UNESCO to adapt the latter’s endangered languages survey to make it suitable for sign language data (Webster & Safar, 2019). Prior to 2011, the UNESCO survey included only spoken languages. The adapted survey contained 21 items, with both multiple-choice and open questions, and asked the respondent to give their own estimate of the overall vitality of their language on the 0-5 scale (see Table 1). The respondents were mostly sign language linguists (although some national Deaf associations also participated), and in some cases they were native users of the sign language in question. The language of the survey, i.e. academic written English, created a barrier for potential respondents from other language backgrounds, especially deaf signers from rural communities. The project website³ included a six-minute International Sign video in which two committee members, Kang-Suk Byun and Nick Palfreyman, discuss the survey’s rationale and procedure, as well as a few of the questions. They state that any potential respondents who want to access the survey in International Sign can do so by emailing iSLanDS and booking an appointment for a discussion via webcam. Providing clips of International Sign translations for each question with some example answers, alongside plain English text, might facilitate broader access to the survey. Deaf consultants could be recruited to specifically examine how accessible the survey is to signers from various backgrounds.

Table 1 (from Webster & Safar, 2019)

Level of endangerment	Score	Example
Safe	5	(none surveyed)
Unsafe/vulnerable	4	Austrian Sign Language
Definitely endangered	3	Kata Kolok (Bali, Indonesia)
Severely endangered	2	Finland-Swedish Sign Language
Critically endangered	1	Mardin Sign Language (Turkey)
Extinct	0	(none surveyed) ⁴

For the scoring process (see Figure 1), the team used averages of the scores from multiple factors to arrive at a single rating per language (see Table 2). The scoring committee (consisting of the seven members mentioned in footnote 1) used the same factors to rate each sign language, apart from

³ Available at

https://www.uclan.ac.uk/research/explore/projects/sign_languages_in_unesco_atlas_of_world_languages_in_danger.php [Accessed 16 March 2020]

⁴ But see e.g. Groce (1985) on Martha’s Vineyard Sign Language.

‘use of the target sign language in deaf education’, which was included in the factor average for urban sign languages but not for village sign languages (Webster & Safar, 2019). Though this makes sense if one is aiming at comparability, it is somewhat problematic to apply the same set of criteria to each language, because they exist in different cultures and circumstances. For example, national sign languages are often legally recognised and tied to institutions, while village sign languages are not. Using a perspective that focuses on institutions and economic utility is not necessarily ideal when assessing the vitality of a language used within a rural community that is deeply connected to their internal cohesion, history, traditions, and natural environment. These aspects are not well catered for in the survey or scoring process.

UNESCO sign language endangerment project

Name of sign language: New Zealand Sign Language (NZSL)

question	area	score (0-5)
Q3	‘Proportion of signers within the reference community’	4
Q4a or Q4b	‘Generational or age group language use’	4
Q5	‘Domains of language use’	4
Q6	‘New domains’	3
Q7	‘Materials for language spread and education’	3.5
Q8	‘Governmental and institutional language attitudes and policies’	5
Q9	‘Use of the target sign language in deaf education’	4.5
Q10	‘Reference community members’ attitudes towards their own sign language’	4.5
Q11	‘Type and quality of documentation’	3.5
Q12	‘Status of language programmes’	3
average		39/ 9 = 4.3

Remember, if this scores 0, don't include it in the calculation of the average.

Assigned score:

<input type="checkbox"/>	5		healthy
<input checked="" type="checkbox"/>	4		vulnerable
<input type="checkbox"/>	3		definitely endangered
<input type="checkbox"/>	2		severely endangered
<input type="checkbox"/>	1		critically endangered
<input type="checkbox"/>	0		extinct



This may not be the same as the average. If it is different, explain this in the rationale.

Rationale:

From comments, while the language is robust within the Deaf community, other factors such as the influence of educational and medical institutional practices do present risk factors for the future of NZSL.

Figure 1: Scoring committee’s score sheet for New Zealand Sign Language

Table 2: Results from the 2011 survey on endangered sign languages (adapted from Safar & Webster 2014; Webster & Safar 2019)

Name of sign language	Name of respondent	Country	Score as determined by scoring committee
Algerian Jewish Sign Language (AJSL)	Sara Lanesman and Irit Meir	Israel	1
Alipur Sign Language (APSL)	Sibaji Panda	India	3
Al-Sayyid Bedouin Sign Language (ABSL)	Shifra Kisch	Israel	3
Austrian Sign Language (ÖGS)	Austrian Deaf Association (ÖGLB)	Austria	4
Ban Khor Sign Language (BKSL)	Angela Nonaka	Thailand	2
Brazilian Sign Language (Libras)	Ronice Müller de Quadros	Brazil	4
Chican Sign Language (ChicanSL)	Cesar Ernesto Escobedo Delgado and Olivier Le Guen	Mexico	2
Danish Sign Language (DTS)	Danish Deaf Association	Denmark	4

Ethiopian Sign Language (EthSL)	Eyasu H. Tamene	Ethiopia	3
Finland-Swedish Sign Language (FinSSL)	Karin Hoyer and Janne Kankkonen	Finland	2
Inuit Sign Language	Joke Schuit	Canada	1
Kata Kolok	Connie de Vos	Indonesia	3
Mardin Sign Language (MarSL)	Hasan Dikyuva	Turkey	1
New Zealand Sign Language (NZSL)	Rachel McKee	New Zealand	4
Yucatec Maya Sign Language (YMSL) – Nohkop	Olivier Le Guen	Mexico	2

4. Case study: Ideologies in the vitality scoring of Yucatec Maya Sign Languages⁵

In this section, we use the example of Yucatec Maya Sign Languages (YMSLs) in order to illustrate how ideological issues surfaced in the questionnaire and that the process of vitality rating is not free from ideological assumptions. YMSLs are indigenous sign languages that emerged in Yucatec Maya communities with a high incidence of deafness in rural Yucatán, Mexico. Because deaf members of these communities never had access to Mexican Sign Language, or any other established sign language, they developed their own local sign languages. These are used by deaf and hearing people alike. In the UNESCO survey, we included data from the villages Chicán, with 17 deaf people from different families, and Nohkop, with 4 deaf siblings. YMSLs from Chican and Nohkop were both scored as ‘severely endangered’ (level 2) due to their small number of users, the ongoing dispersion

⁵ In this section, there are inconsistencies in terminology but we mainly use the plural form to refer to the sign languages in Yucatec Maya communities. We are aware that by assigning this label, we are ourselves taking an ideological position in the debate we describe in this section. The use of the plural form is in line with other work by the second author (see Safar, 2017, for a thorough discussion of terminology).

of the signing communities and the fact that no deaf children have been born in the recent past. The reader is referred to Safar & Le Guen (in press) for a detailed sociolinguistic overview of YMSL communities.

4.1. Name of the language

The first ideological debate concerns the question of whether YMSLs should be considered one unified sign language with different regional varieties or several distinct sign languages in different villages. Even though signers from the different communities have not been in contact in the past and their sign languages emerged independently from each other, they display similarities on various linguistic levels (see Safar 2017; Le Guen et al., in press). These resemblances can partly be attributed to the fact that signers draw from the same repertoire of conventional gestures used by hearing speakers of Yucatec Maya and that they share the same cultural background (see also Green, 2014, about sign languages in Nepal). In previous work, researchers have referred to the language as Yucatec Maya Sign Language (Le Guen, 2012), Maya Sign Language (Johnson, 1991), Nohya Sign Language (Shuman, 1980), and Chican Sign Language (Escobedo Delgado, 2012; Zeshan et al., 2013). The 2011 adapted UNESCO survey has a section where alternative names of the language can be listed, but these names are not necessarily equivalent and interchangeable. The practice of labelling a language is not a simple operation but an ideological process in itself (see Makoni & Pennycook, 2006): it defines the boundaries of a language and delimits it from other languages or varieties. Whether we look at sign language varieties used across a larger geographic region or focus on one particular language determines the size of the reference community (see Figure 2) and thus has a direct impact on the vitality score assigned to this language. This question is very difficult to resolve and as stated in the first section of the questionnaire, the survey relies ‘on common-sense understandings’ of language vs. dialect.

Reference community

For sign languages, it is not obvious what the definition of “reference community” should be because the concept of a “reference community” for spoken languages is not easily applicable to many sign language situations. In principle, the “reference community” means all people who may be expected to be using a particular language variety according to their ethnicity, heritage, culture, history and geography. If fewer and fewer people in this “reference community” actually do use this particular language, it is likely that the language will be or become endangered. For many sign languages, it is not easy to say exactly “who should be expected to use sign language” in this sense. The notion of “reference community” is however crucial for the purpose of this questionnaire and cannot be left out. It is therefore suggested that the reference community of a sign language may include the following groups of people:

- a) All deaf people of all ages, except those deafened due to old age
- b) Hearing relatives or spouses of deaf people:
 - i. Hearing children of deaf people
 - ii. Siblings of deaf people
 - iii. Spouses of deaf people
 - iv. Other hearing relatives of deaf people, as culturally relevant
- b) Other groups of hearing people in regular contact with deaf people, if culturally relevant (e.g. neighbours, professionals such as sign language interpreters, co-workers)

Which of these categories are included in the calculation of reference community (e.g. only group a., groups a. and b.i., or all groups) is a matter of individual judgment. Membership in the reference community would include linguistic and cultural aspects such as identity, visual culture, fluency in the sign language, etc., and these need to be taken into account when thinking about the reference community. Moreover, the categories may be specified further, e.g. to include only younger siblings, or to exclude deaf children with cochlear implants. Category c) will always depend on the local culture.

Sometimes it may make sense to talk about several reference communities for one and the same sign language. For example, Indo-Pakistani Sign Language users in Pakistan could be a separate reference community, although users of Indo-Pakistani Sign Language live in both India and Pakistan. Also note that in the case of “deaf villages”, i.e. rural communities with a high incidence of hereditary deafness where a local sign language has been developed and is used by both deaf and hearing people, the reference community may simply comprise the entire village.

Figure 2: The definition of ‘reference community’ from page 5 of the adapted survey (UNESCO & iSLanDS, 2011)⁶

⁶ Note that this definition leaves out parents of deaf children as well as the non-deaf learners of sign languages with few if any ties to deaf communities, who outnumber deaf signers in some cases (e.g., American Sign Language, Swedish Sign Language). This illustrates that the definition of ‘reference community’ provided in the 2011 survey might not be exhaustive.

The scoring committee received questionnaires for YMSL/Chican SL with different language names and diverging numbers of signers for the total reference community. After discussing this question, the committee decided to analyse the questionnaires for different Yucatec Maya communities separately so as not to skew the results and obtained individual scores for YMSL (Chican) and YMSL (Nohkop). Other researchers may have come up with different solutions and it highlights that the conceptualisation of languages as countable and discrete entities is an ideological practice that has very concrete effects on the vitality rating of a language.

4.2. Difficulties in filling out the questionnaire for YMSLs

Apart from the more general issue of naming the language, other parts of the questionnaire turned out to be difficult to answer for YMSLs. One was the request for a reliable estimation of the number of signers in the YMSL communities. Again, the questionnaire builds on an intuitive understanding of 'who is a fluent/competent sign language user?' This brings up the question of whether respondents should be the ones assessing the signing proficiency of the language users and on what grounds.

For YMSL (Chican), Escobedo Delgado (2012) reports that in addition to the 17 deaf signers, he identified 332 hearing signers (121 of them 'fluent in sign language' and 211 with 'some competence'). He states in his questionnaire that 'half of the population in Chican uses the local sign language'. About YMSL (Nohkop), Le Guen notes in his questionnaire that there are 4 deaf and 30 hearing signers but that 'the majority of the community are not fluent in YMSL'. In neither case it is made clear how the respondents determined who is a 'fluent signer' and which criteria they applied to assess people's signing skills. Note that (sign) 'language competence' is not an absolute value but is contingent on the specific communicative constellation and various circumstantial factors (see Green, 2014; Safar, 2017), e.g. familiarity or attitudes. In the Yucatec Maya communities, some hearing signers state they can communicate easily with their deaf relatives but have trouble understanding the signing in other families (see Safar, 2017). During her fieldwork in Yucatan, Safar sometimes directly questioned hearing people about their signing abilities and some of them said they did not know YMSL. Minutes later, she witnessed the same people having extended and fast-paced signed conversations with their deaf relatives or neighbours. These contradictions arise not only because people are being modest about their language skills but also because researchers and language users can have diverging concepts of what a language is and what it means to 'know' a language. As a scoring committee, our understanding of language proficiency is influenced by (academic) ideological assumptions that may not mirror the actual communicative reality in the language communities in question.

A further difficulty was to determine what constitutes a generation of signers in a village signing community. As Kisch (2012) points out, in the case of shared/village sign languages, generations cannot be demarcated only in terms of age groups, but it is also necessary to take into account additional factors such as interactional networks, educational experiences, and exposure to other languages. For YMSLs, Le Guen (2012) suggests that in Chican, it makes more sense to distinguish various 'interactional groups' rather than generations of signers. It thus becomes problematic to answer parts of the questionnaire such as 'All generations/age groups, including most children, use the language competently' (Question 4a; see Figure 3 below) for languages like YMSLs.

4.3. Language attitudes from language community and government

In public discourse about YMSLs, we encounter various controversies and ‘ideological clashes’ (Safar, 2015). From the perspective of deaf people from urban communities, e.g. in Europe or the US, the village of Chican is often portrayed as a ‘Deaf utopia’ (Kusters, 2010) where everybody knows sign language and deaf people are not discriminated against – but the reality is more complex than this. In different contexts the language is described as ‘a rich sign language’, ‘maybe the world’s oldest sign language’, ‘a simple communication system based only on common sense’ or ‘a part of the nation’s cultural heritage’, depending on who is talking and which ideology stands behind it (Safar, 2015).

In a Critical Discourse Analysis of Mexican and international media reports, Safar (2015) shows that deaf indigenous people and their languages are often subject to discriminatory attitudes that portray deaf Yucatec Maya people as poor, disabled, ‘with no language’ and needing to be fixed (see also Moriarty Harrelson, 2017, for similar observations on ideologies expressed about deaf people in rural Cambodia). This pathological ideology collides with a ‘cultural diversity’ ideology expressed by the government and stakeholders. In a multilingual country like Mexico with 364 indigenous spoken language varieties (INALI, 2012), linguistic and cultural diversity is framed as a richness that needs to be preserved and that forms part of a nation’s heritage. There are laws protecting the linguistic rights of indigenous minority language users in Mexico as well as users of the national Mexican Sign Language. The National Institute for Indigenous Languages (INALI) has in the past supported research activities surrounding YMSLs (for instance the publication of a bilingual book about the Yucatec Maya signing communities, written in Yucatec Maya and Spanish and directed at a non-academic audience).⁷ But so far neither YMSLs nor any of the other indigenous sign languages used in other parts of Mexico (e.g. in Oaxaca or Chiapas, Mesh & Hou, in press; Haviland, 2013) have been legally recognised. We also need to ask what impact language planning activities towards recognition and/or conservation would have on the actual language communities. In question 10 of the adapted survey about community members’ attitudes towards their own sign language, it is assumed to be the ideal scenario that ‘all members value the language of their community and wish to see it promoted’. However, as several respondents of the questionnaire pointed out, community members can have a positive attitude toward their sign language without necessarily showing any initiative to politically promote the language. Le Guen commented in the questionnaire on YMSL: ‘YMSL is not considered by the community members as something special, or as a language on its own. It is perceived as the only available means of communication with the deaf. It is difficult to talk about metarepresentation of the language, let alone valorisation’. In cases like the Yucatec Mayan, community members do not necessarily display either a ‘biological species’ or an ‘edifice of culture’ ideology towards their languages. They see sign language as an efficient, pragmatic means of communication rather than an object of metalinguistic reflection (Safar, 2017). In this view, language is framed as ‘an activity rather than a structure, as something we do rather than a system we draw on, as a material part of social and cultural life rather than an abstract entity’ (Pennycook, 2010: 2).

⁷ Available at https://www.gob.mx/cms/uploads/attachment/file/438175/inpi-el_habla-de-la-mano-lengua-de-senas-maya-yucateca-movil.pdf [Accessed 16 March 2020]

It seems that none of the UNESCO surveys to date can account for a comprehensive assessment of the complex and often contradictory attitudes of governments and language users.

5. Ideological perspectives behind some of the factors in the adapted survey

Although the 2011 survey was adapted from a questionnaire used to assess spoken languages, the factors ultimately chosen for the assessment of sign languages were still based largely on assumptions about the major determinants of vitality for spoken languages. This may be due to the nature of adapting an existing tool instead of generating an entirely new one. It might also be a result of the overwhelming dominance of spoken languages in the language vitality literature. Another improvement to the scoring process might be for the factor weights to be differentiated, particularly when scoring national versus village sign languages, for example to account for the use of languages for ceremonies (cf. Green, 2014). The following sub-sections briefly explore the ideologies behind three of the most controversial factors⁸ in the survey, which were questioned by respondents and are debated in the literature: generational language use (5.1), governmental policies (5.2), and the community's attitudes toward their own sign language (5.3).

5.1 Generational or age group language use

Use of the sign language by generation or age group was item 4 in the adapted survey (Webster & Safar, 2019; see Figure 3). Intergenerational transmission is identified by Fishman (1991: 113) as the most crucial factor in preventing the decline of a language. For sign languages, children's acquisition is said to be the 'most critical factor' in determining the level of vitality (McKee & Manning, 2015: 484). If factor weights were to be differentiated in the scoring process, this one should perhaps be weighted most heavily. Children's acquisition relies on transmission by skilled adult users of the language (cf. Sallabank, 2018), and a population of deaf children to learn it, which is decreasing due to genetic factors and medical interventions such as vaccination programmes. 'Generation' or 'age-group' is not always straightforward to define for sign languages (Kisch, 2012), and sometimes 'interactional groups' is used instead, as noted in section 4 (Le Guen 2012; Safar 2017; Safar et al., 2018).

Deaf children's acquisition of sign languages is made difficult by their very limited, and often non-existent, access to adult signers. This often causes language deprivation, which is not only a threat to linguistic diversity and deaf culture, but also to the cognitive and emotional well-being of deaf children and adults (Snoddon, 2008; Murray, Hall & Snoddon, 2019; Murray, 2020). Sign language ideologies are interwoven with 'perceptions of deaf people's worth' (Murray, 2020: 350). In this sense, the ideologies of culture and biodiversity fail to capture what is at stake when sign languages are threatened. Language deprivation has generally been seen as less severe in village sign language communities where hearing people tend to have a positive attitude toward visual communication (Zeshan & De Vos, 2012; but see Kusters, 2010 and Braithwaite, this volume, for a critical analysis of this claim). However, as a result of globalisation, literacy and formal schooling are becoming increasingly important in rural signing communities. This leads to an imbalance between deaf and hearing people's opportunities in terms of education and occupation and creates more situations in

⁸ Other factors, such as the proportion of signers in the reference community, were also controversial but only three factors are discussed here due to space limitations.

which deaf people experience language deprivation (Nonaka, 2009; Safar & Le Guen, in press) because the children attend schools that do not provide access to sign language. It is unclear what effect this risk of language deprivation has on sign language vitality. The spectre of deaf children's 'languagelessness' can be used to argue for the protection of sign languages, or it can be exploited by the opponents of sign languages to argue for 'neo-oralist solutions' that promote speech (Murray, 2020: 341).

The factor of generational use and transmission contains an ideological assumption that sign languages are bounded entities that can be passed on from one generation to the next (Makoni & Pennycook, 2006). But signing sometimes overlaps with other forms of communication. In contact signing (e.g. Turner, 1995), there is an 'intertwined' and 'intense' connection between the signed and spoken languages, which leads to 'a hybrid communication system similar to pidginisation, borrowings, and other contact language processes' (LeMaster & Monaghan, 2004: 144). There is also a problem with the prescriptive definition of 'language use' or 'user' in ideologies that present languages as bounded entities. Human beings have a propensity to be multimodal and use translanguaging (e.g. Kusters et al., 2017; De Meulder et al., 2019). Translanguaging and multimodal practices, however, are not assigned a positive value within ideologies that present languages as discrete entities. These ideologies value skill in a single, identified language (particularly the 'standard' language), while code-switching and multimodality are seen as compensations for their 'deficiencies' in the target language. People who use multilingual, multimodal communication may internalise these ideologies and see their own language use in a negative light because they are not conforming to the standard (Kroskrity, 2004). Deaf signers may feel that by engaging in multimodal communication, they are not adhering to the 'pure' version of any language, signed or spoken.

In many countries, substantial numbers of parents are given explicit advice by professionals to forbid their deaf child to sign because of ideologies that are deeply ingrained in the interface of education and audiology (e.g. McKee & Manning, 2015). This could be evidence of government-sponsored 'murder' of sign languages, in the terms of Skutnabb-Kangas & Phillipson (2010: 78):

Misinformation to the parents of deaf children about cochlear implants may [...] create the belief that these children would come to 'hear' through implants; therefore many parents mistakenly think that there is no need for sign languages.

There seems to be an assumption in the survey that language shift is the primary threat to vitality. (An option for question 4b, shown in Figure 3 below, states that 'Only a handful of individuals still use the sign language and everyone else has shifted to other languages'.) In fact, many deaf children may not have shifted to any other language but may be altogether prevented from signing, for example because of their parents' choices, interventions by medical or educational professionals, a lack of contact with other signers, and/or overt institutional policies.

5.2 Governmental and institutional language attitudes and policies

This factor was covered under question 8 in the adapted survey. When a national language is legally recognised and institutionalised, people come to see that language as being connected to progress, and others as outdated or unneeded (May, 2011). The majority of sign languages are at risk because governmental language policies do not institutionalise them or address signers' dwindling opportunities for intergenerational transmission (e.g. McKee & Manning, 2015). For example, in New Zealand, many deaf people thought that recognition of their language through the NZSL Act would enable them to enjoy the same access to daily life as everyone else, but this has not happened

(McKee & Manning, 2015, 2019) because the legislation does not address the reasons why there is inequality in the first place. In other words, legislation only tackles the symptoms and does not change the underlying discriminatory structures.

Governments often pass legislation that recognises languages in name only, or restricts funding to interpretation and translation, without any other practical measures for provision (e.g. funding for language classes, sign-language-medium education for deaf children, specialised sign language tuition for parents of deaf children, or reducing barriers to teacher education and licensure for deaf people). In such cases, governments create a false sense of security in the language community. This failure to ensure meaningful provision is in part the fault of the circumscribed 'disability access' framework, into which sign language policies are often subsumed (e.g. Snoddon, 2009). But it also echoes the ideology of language as a biological entity that must be 'named' and 'protected' in law, even if only in a symbolic, tokenistic way for political clout (see Sallabank 2018). This deprioritises the actual users of the language. In other words, the government's attitude toward endangered languages seems to be connected to a potential weakness of the endangerment discourse itself: it focuses on threatened languages instead of threatened *communities* (Blommaert 2001; Heller 2004). Dotter et al. (2019) note that despite legal recognition of Austrian Sign Language, it is still used only very sparsely in education. Likewise, McKee and Manning (2015) point out that the NZSL Act only covers status planning, and neglects to address documentation, acquisition, and access to communication and information. They argue that 'without mechanisms to articulate policy and implement practices in specific domains, status planning alone can fail to strengthen instrumental language rights in everyday life and to maintain the vitality of a language' (ibid: 476).

When examining ideologies related to languages, we may find surprising connections and conflicts between states, NGOs, educational institutions, and political groups (Gal, 1998). The very infrastructures within which public bodies, research funders, and academic institutions operate may be infused with discriminatory attitudes toward sign languages. This includes portraying sign languages as lexically inadequate (Murray, 2020) and relying on medical or pathological discourse when referring to sign language communities, for example framing their languages as 'communication aids' (Murray, 2015) or 'material objects used by hearing people as accessibility devices in the service of inclusive education' (Murray, 2020: 344-5). The study of vitality also often draws on political-economic discourse, and a focus on the utility of languages in the economic and political spheres as a determiner of vitality. Question 8 about governmental attitudes addresses this explicitly but other questions also implicitly ask about government policy, because this often determines to what extent a language is used in education, the media, documentation efforts, and revitalisation programmes. The survey makes much less mention of traditional and environmental aspects, e.g. how much the sign language is involved in specific cultural activities and how much it is used to talk about the natural world.

5.3 Community members' attitudes towards their own sign language

This factor, question 10 in the adapted survey, is perhaps the most multi-faceted and challenged by respondents. Firstly, it is important to note that it is problematic when non-deaf scholars represent deaf people's ideologies about sign languages. A number of the respondents and scoring committee members, including the two authors of this paper, are hearing scholars, as are most UNESCO consultants and writers of the literature on endangered languages. If a researchers' first language is a dominant language, they are unlikely to have ever experienced the oppression of their language themselves (Skutnabb-Kangas & Phillipson, 2010). Thus, they tend to have little awareness of their privileged situation and the 'market benefits' that they enjoy as users of majority languages (ibid:

92). Kusters (2010) expresses concerns that claims about deaf people's experiences are often based on accounts that do not involve the perspectives of deaf people themselves. Today, there is a growing number of publications focusing on language ideologies expressed by deaf people and written/edited by deaf scholars (e.g. Kusters & Sahasrabudhe, 2018; Kusters et al., 2020; Moriarty Harrelson, 2019).

Scholars sometimes underestimate the importance of community members' own attitudes toward their language, and may even reject their attempts to document or revitalise their language (Collins, 1998). This can contribute toward an ideology of inferiority among endangered language users, which may be worsened by political and economic circumstances (e.g. Dorian, 1994). Because the attitudes of community members are oversimplified, aspects of the scoring process of the questionnaire itself may also promote this ideology of inferiority, even when, as members of the scoring committee, our ideological goal is to draw attention to the need for revitalisation or protection. One problematic issue here may be the characterisation of community members' attitudes as a single factor with multiple-choice responses concerning only the degree to which the language is valorised by the community. For example, a future survey may differentiate this further and investigate the presence of particular themes such as '[signers] should not be yoked to older signs and older times'; 'young deaf people sign ungrammatically'; and 'sign languages are of critical importance for [deaf people's] identity, their self-worth, and their ability to navigate society' (Murray, 2020: 336, 343, 350).

Academics' assertions about languages are inherently ideological and biased toward certain interests, e.g. due to linguists' roles as specialists informing public and government-supported organisations (Collins, 1998). This ideological bias inevitably concerns us as members of the scoring committee as well as our academic colleagues who filled out questionnaires. Placing more weight on the community members' own perspectives in the survey, and consulting any existing or aspiring deaf sign language linguists within that community, could compensate for this. Terms like 'native speaker' can have a very different meaning for the language users versus the academic (e.g. Cormier et al., 2012). Many endangered language users are unable to negotiate painful identity issues because they are bullied by a critique of 'not being native enough', and they may then stop trying to use the language (King & Hermes, 2014: 279). Thus, the extent to which the language community offers validation to new learners is an influential component of 'community's attitudes' (De Meulder, 2019).

Nonetheless, the community viewing their language as beautiful or valuable does not necessarily mean that the community will undertake efforts to protect or revitalise the language (see Safar, 2017 for YMSL; Kusters, 2014 for Adamorobe SL; see also Webster & Safar, 2019). One respondent commented that although the community had positive attitudes toward their language, they did not overtly express a desire for the language to be maintained or strengthened. Another possible scenario is that some users of minority languages may be affected by 'linguistic capital dispossession', which occurs when individuals select languages that they think will 'serve their personal interests best', believing that in doing so, they must stop using their native language (Skutnabb-Kangas & Phillipson, 2010: 82).

To sum up our reflections on the adapted survey, in general there was a slight tendency for languages to have a higher level of vitality according to respondents, and a lower level according to the scoring committee. When concentrating on measuring, rating, and scoring sign languages, as the scoring committee was doing, we were viewing them in relation to each other and in the frame of the 'biological species' ideology. This involves the representation of linguistic vitality as empirically measurable, and presents languages as recipients of appraisal, intervention, management and

protection from threats. But the vitality of a language is something more complex than can be expressed in a numerical score; a language can be endangered on one level, but robust on another level. For example, a sign language may be thriving among its community of users even though from a larger, long-term, socio-political perspective, it is endangered. A user of an endangered sign language might be keenly aware of the culture and community, its history and activities, and the personal, professional and communal strengths of its members (Padden, 2001; Sallabank, 2018). To reflect the unique situation of a language community, the vitality score could be supplemented with a mixed-methods assessment such as that carried out by McKee (2017) for NZSL (see also McKee & McKee, this issue).

6. Ideological shifts in UNESCO's 2018 survey on sign languages

UNESCO's new 'Survey of World Languages' was released in August 2018, and marks the first time that UNESCO has released a dedicated survey on signed languages alongside one for spoken languages. There are multiple reasons to regard this as a beneficial development for the status, representation and visibility of sign languages. Perhaps most importantly, it transmits a message to UNESCO member states about the parity of spoken and signed languages, and if taken seriously, the survey will trigger action by governments to find out who in their country is responsible for their sign languages.

An important difference between the 2011 adapted survey, and the 2018 survey, is that the former is explicitly focussed on language endangerment, whereas the latter aims to collect data on all languages, without setting out to target vitality. Both have questions that are relevant to vitality, e.g. on generational language use, but the questions in the adapted survey are more clearly intended to address language endangerment (for example, the multiple-choice options for the question on the use of the language in different domains go into detail about 'dwindling domains' and 'highly limited domains'.) The adapted survey contains explanatory text and definitions that appear with each option for each question (see Figure 3), while the new survey aims more at standardisation and comparability (see Figure 4), with explanatory text in a separate manual.

Note: The following question is only for situations where a new sign language is emerging, which is used only by younger signers and has no longer history. Therefore, options 2-5 consider only people in age groups of the oldest available signer and younger, where the oldest signer could be at any age, for example, a young adult. It is very difficult to decide whether a variety of signing is a "young/emerging sign language" or an instance of home sign. Criteria include the size and stability of a community of sign language users, the number of generations using the language (time depth), and the level of conventionalisation. Systems ranking low on these criteria may be home sign systems, but the decision needs to be made by the individual respondent. There is probably a continuous scale of signing varieties along these (and other) criteria. Home sign systems are outside the scope of this questionnaire, so if you think you are dealing with a home sign system, the questionnaire will not apply. See also the note under 4a. about the meaning of "competent" sign language use.

4a. Generational or age-group language use	5	<input type="checkbox"/> All generations / age groups, including most children, use the language competently	Reliability Index: 3 <input type="checkbox"/> 2 <input type="checkbox"/> 1 <input type="checkbox"/> 0 <input type="checkbox"/>	Please specify whether your answers pertain to 'generation' or 'age group', and add further comments if desired.
	4	<input type="checkbox"/> Most adults and some children use the language competently		
	3	<input type="checkbox"/> There are few child signers, and many in the parent generation / age group have considerable interference from language contact with other signed/spoken languages		
	2	<input type="checkbox"/> Only some in the parent generation / age group, and older, use the language competently		
	1	<input type="checkbox"/> Only grandparents and older generations / age groups use the language competently		
	0	<input type="checkbox"/> Nobody uses the language any more <input type="checkbox"/> Other specific situation (please describe in comments box)		

Note: Using the sign language "competently" means using its own native vocabulary and native grammatical structures. When people use signs in the order of a spoken language to make it parallel to speaking, when a lot of fingerspelling and/or borrowing from another sign language's vocabulary is used, when people accompany their speech with some signs unsystematically, and/or when an artificial signed code is used instead of the natural sign language, these are features of interference from language contact. If you are responding in terms of age groups, you can specify in the comments box what age ranges you are considering.

4b. Generational language use (emerging sign language)		Reliability Index:	Comments
5	<input type="checkbox"/> From the generation of the oldest signer down to the youngest, all generations use the language competently. The oldest signer may belong to any age group, and there may be no signers older than that age group, due to the recent emergence of the language.	3 <input type="checkbox"/>	
4	<input type="checkbox"/> A substantial sub-section of age groups from the oldest signer "downwards" uses the sign language competently, but the language is starting to be lost from some age groups e.g. the youngest ones.	2 <input type="checkbox"/>	
3	<input type="checkbox"/> A smaller sub-section of age groups from the oldest signer "downwards" uses the sign language competently, and the language has been lost in several age groups.	1 <input type="checkbox"/>	
2	<input type="checkbox"/> There are only some signers left in the age groups from the oldest signer "downwards", and most have shifted away from the language.	0 <input type="checkbox"/>	
1	<input type="checkbox"/> Only a handful individuals still use the sign language, and everyone else has shifted to other language(s).		
0	<input type="checkbox"/> Nobody uses the language any more		

Figure 3: Questions about generational and age group language use from the survey on sign languages (UNESCO & iSLanDS, 2011)

10. Age Distribution of Users

What is the age distribution of users of the language?*

Generation	Number of Users
Younger generations (<15 years)	<input type="text"/>
Middle generations (15-65 years)	<input type="text"/>
Older generations (>65 years)	<input type="text"/>

Source:

Comments/notes/remarks:

* If the actual number is not available, please insert an approximate value.

11. Generational Use

What is the generational language use?

☐ All generations
☐ Reduced among younger generations (<15 years)
☐ Limited to middle and older generations (15 years and older)
☐ Confined to older generations (>65 years)
☐ Restricted to a few elders
☐ No use

Comments/notes/remarks:

Figure 4: Questions about generational and age group language use from the survey on sign languages (UNESCO, 2018)⁹

⁹ These questions are from the version of the survey for sign languages. There are two versions of the survey: one for spoken languages and one for sign languages (UNESCO, 2018).

The following sub-sections cover three ideological aspects of the new survey: deaf signers' access to it (6.1); its portrayal of sign languages as discrete, static entities that fit into binary categories (6.2); and a hierarchical, globalist ideology that is discernible from several of the questions (6.3).

6.1 Sign language communities' access to the data collection and scoring process

A concern throughout the work on the adapted survey was that approaches to data collection and scoring should maximise the involvement of sign language community members, as experts, advocates, and analysts. The iSLanDS Institute put a video with an explanation of the project in International Sign (IS) on its webpages. Although not all deaf people use (the same kind of) IS and it did not make the content fully accessible to deaf people, the video represents an alternative to written text as the only medium. Moreover, both the questionnaire respondents and scoring committee¹⁰ included several deaf members of sign language communities, some of whom are themselves users of what were perceived to be endangered sign languages. The project team intended to produce a translation of the adapted survey in IS, but unfortunately, this was never achieved. This was due to a lack of sufficient dedicated resources for this work, and because iSLanDS itself exists within an academic institution and is not immune to the ideological prioritising of written English.

The new UNESCO survey on sign languages is neither available in any sign language, nor is there any signed explanation of the survey or its purpose. Deaf participants were present at planning meetings about the new survey, but the provision of the survey only in spoken (written) languages suggests a 'data-driven' ideology, i.e. a focus on making the data collection and analysis as efficient and cost-effective as possible. Another reason for this is UNESCO's own tendency to use written languages that have a prominent status within their organisation. However, such an approach may appear audiocentric, and may place sign languages at a disadvantage, because they require different and less automated methods (for example, because most sign languages have no written form and sign language data cannot be processed with analytical tools as quickly as written languages). There is a growing awareness that sign language research should involve deaf signers in as powerful a way as possible, ideally being led by them (Sign Language Linguistics Society, 2016), and that signed versions of the aims, methods and outcomes of research should be provided wherever possible so that they are more accessible to signers.¹¹

It is valorising to signing communities to place their languages on a par with spoken languages by releasing the two questionnaires alongside each other for the first time. But if the spoken language questionnaire is available in four spoken languages (English, French, Spanish and Russian), then it would be beneficial for the sign language survey to be available in at least one sign language. This would increase the visibility of sign languages. Instead, the sign language survey is available only in spoken languages, so there is still an imbalance that disadvantages sign language users. While we believe that it would be beneficial for the questionnaire to be translated also into other spoken languages than these four major ones in order to grant speakers of non-dominant (e.g. indigenous) languages access to the survey, the status quo raises a question about the plausibility of aligning research on the vitality of spoken and signed languages. It is unclear to what extent researchers and institutions are willing and able to make the processes of evaluating endangered languages equally

¹⁰ The scoring committee was comprised of members who were invited to join by Ulrike Zeshan, the director of iSLanDS, who led the work on the 2011 adapted survey.

¹¹ Some spoken language users also lack access to information on endangered languages, including to archives of recordings of their own languages (Walsh, 2010). Many spoken languages have no written script, so text-based resources are not available.

available to both speakers and signers. This reflects a rather hegemonic ideology. It might take a long time to change this ideology, though we see steps in this direction.

Endangered language projects often present themselves as being ‘aligned with speakers’ (Muehlmann, 2008: 20), but the new UNESCO survey does not appear to have any pretence of being ‘aligned’ with signers (or, indeed, with speakers of languages other than English, French, Spanish and Russian), given that they have not been provided with any signed information about it. There is also no version in plain or modified English, which would not be as costly to produce as a signed translation and would support the inclusion of more people in the research process.

6.2 Sign languages as discrete, static entities with binary classifications

Because of UNESCO’s desire to collect data in a relatively standardised way that is straightforward to process, it is perhaps understandable that the new survey assumes that sign languages are discrete bounded entities, contains many instances of simple binary options and captures data that is static rather than longitudinal. The allowance for gradation and nuance that was seen in the adapted survey, such as a ‘reliability index’ where respondents could indicate the strength of existing evidence for each of their answers (see Figure 3), is not present in the new survey.

The overarching concern of collecting data in an automated way, and ensuring that it is easy to process, necessarily prioritises quantitative over qualitative data, and reflects the ‘biological species’ ideology in which languages are entities that one can investigate using an empirical approach. However, it is difficult for linguists to argue that languages can be isolated as bounded entities and quantified. Similarly, Muehlmann (2012: 164) states that it has become ‘almost unheard of’ for an anthropologist to give a precise number of cultures that exist in the world because of the many years of research that has discredited notions of cultures as bounded entities. Quantitative data is valuable as a starting point but needs to be supplemented with qualitative research that clarifies ideological perspectives and offers more explanation of phenomena. Examples of questions that give binary options are: (1) ‘Is the language legally/officially recognised or not recognised?’ and (6) ‘Do users live mainly in rural settings, urban settings, or both?’ (UNESCO, 2018). Question 1 does not acknowledge any grey area between recognition and non-recognition, for example where a language may be mentioned in disability rights legislation but not explicitly protected by any law, and it does not allow for the many cases where a language is ‘recognised’ in a tokenistic way, with its users being given no language rights (De Meulder, Murray & McKee, 2019).

14. Language Competence of Users

What is the language competence distribution for users?*

Competence level	Total number	Number of male users	Number of female users
Understand all, speak fluently			
Understand all, speak well			
Understand well, speak some			
Understand some, speak little			
Understand little, speak none			
Language not used			

Source:

Comments/notes/remarks:

* If the actual number is not available, please insert an approximate value.

Figure 5: Question 14 about the language competence of user from the survey on sign languages (UNESCO, 2018)

Some questions ask for specific numbers of users, even though this information is quite difficult to find. In many countries, even developed ones, the data on numbers of sign language users is very unreliable (e.g. McKee, 2017). The UNESCO (2018) survey even goes a step further and asks for specific numbers of signers in groups ranked by age group, e.g. under 15, 15-65, and 65+ (question 10) and language competence (question 14, see Figure 5). The latter question also confusingly gives an option of 'language not used'. It is unclear why one would include people as members of a language community who do not use the language. Perhaps this may make sense in some spoken language contexts (and indeed, the question uses the word 'speak' instead of 'sign'¹²), e.g. where the spoken language is seen to be used throughout a certain region but there are also people living there who do not speak it. Sign languages are used primarily by deaf communities who are often locationally dispersed, so this is an instance where it is not ideal to facilitate greater automation by using the same questions and options for spoken languages and sign languages.

It has been previously noted that static data on sign language endangerment is of limited value, and that repeated rounds of data collection are needed to give us the longitudinal picture (Webster & Safar, 2019). The scoring committee was contacted by respondents not long after the scoring was completed in 2014 to report that the endangerment status had already shifted, e.g. due to legal recognition and protection (for Finland-Swedish Sign Language, see De Meulder, 2017). Braithwaite (2019) notes that a signed language in Grand Cayman had already died out by the time it was described by Washabaugh (1981), and that though this is a well-known study in sign language linguistics, there are no follow-up studies. Something similar happened when Woodward (1991) reported on small-scale sign languages in Costa Rica (named Brunca Sign Language and Bribri Sign Language) but no further research on these was carried out (Braithwaite, 2019). This may have been due to pragmatic or logistical constraints (such as the relative lack of sign language linguists and dedicated resources) that stemmed from ideological reasons. Repeated assessments can provide longitudinal data so that researchers and communities can ascertain whether sign languages are increasing or decreasing in vitality. This information might facilitate more meaningful investigations of what phenomena affect sign language endangerment specifically, as language shift can happen much more rapidly for sign languages than spoken languages, e.g. due to language contact and multilingualism (Braithwaite, 2019). However, these more rapid shifts are under-studied, and it is only within the last decade that we have any data on sign language endangerment at all. Standard sign language varieties are highly valuable in bilingual educational programmes, but it may be useful to consider the impact of multimodality on vitality. It is not clear to what extent multimodality has a protective or deleterious effect on the vitality of sign languages. Some changes in the grammars and lexicons of sign languages may stem from the use within education of signing systems that incorporate grammatical features of spoken languages, such as Signing Exact English (Turner, 1995). Scholars who sign fluently may be susceptible to ideologies that support the dominance of academic English and the use of English-based signs (Kurz, Reis & Spiecker, 2020).

6.3 Hierarchical and globalist perspective

Perhaps the most notable ideological aspect of the new survey is its globalist perspective, with an emphasis on hierarchies and political-economic considerations. This again understandably reflects

¹² This wording shows that the survey questions were not fully formulated to include signed languages; this may have been a simple oversight but it hints that the survey's primary concern is with spoken languages, and that sign languages are subsidiary.

the nature of UNESCO as a UN-organisation, but it is worthwhile to question the possible ideological assumptions behind the structuring of several of the items.

Examples of ideological hierarchies within answer options include placing 'international' at the top and 'local' at the bottom (question 16); placing 'quinary sector - highest levels of decision making' at the top and 'production of raw materials and basic foods' at the bottom (question 17); placing 'managers and professionals' at the top and craft and agricultural workers lower down (question 13); and placing 'public/institutional domains' at the top and 'private domains' at the bottom. Another example is the arrangement of levels of education with 'tertiary' at the top even though this type of education is largely inaccessible to deaf signers in many areas due to systemic barriers (question 12). All of these questions also focus on political and economic activity. The way that the questions are structured seems to devalue the types of backgrounds, jobs and education levels that signers in many communities might have.¹³ The arrangement of options in a questionnaire may influence the scoring process (e.g. triggering respondents to select a 'socially-endorsed' option because of a belief that 'first or higher-up is better').

The ranking of institutions as being above private domains such as the home (question 18) is questionable. The home is where people generally begin their lives and have their most formative language experiences, although this might not always be true for deaf children, who may not learn any language until they begin school, meet other deaf children, and/or encounter a signer of a named sign language. Question 19 focuses on 'language use in administration', again emphasising governmental organisations and activities. In contrast, there is a lack of questions about grassroots organisations and activities, which may be highly valued within sign language communities. The survey could be read as placing use of the language in the 'primary socioeconomic sector' within the lowest status ranking, leading to ideological assumptions and connections between language vitality and the political-economic status of users. This requires further critical analysis and ideological clarification (Fishman, 1991). With so few questions about local culture, nature and the environment, and so many questions about governmental institutions and the economy, a rather circular kind of reasoning becomes evident where the emphasis on institutional and political aspects of language use is continually reinforced while the importance of unique traditional, cultural and environmental aspects is increasingly sidelined. This may further entrench 'patterns of linguistic stratification [that] subordinate those groups who do not command the standard' and emphasise the interests of those who use the dominant, politically and economically valorised, 'standard' language (Kroskrity, 2004: 509). Such a hierarchical ideology automatically places many minority languages, e.g. village sign languages, on the bottom of the hierarchy.

7. Conclusion

This paper has considered the ideologies behind a strand of work on sign language endangerment and vitality that led to the first UNESCO survey to include signed and spoken languages alongside each other. In this kind of research, an examination of ideologies is useful when evaluating the effectiveness of the work. A case study of ideologies surrounding endangered village sign languages, YMSLs, highlighted that some communities have a perspective that does not fit into the 'biological species' or 'edifice of culture' ideologies, as indeed they do not engage in the kind of metalinguistic reflections that linguists do. This highlighted a problem with framing sign languages within

¹³ This, of course, concerns also users of spoken languages in non-industrialised countries, e.g. in communities that traditionally live off agriculture.

endangerment ideologies and demonstrated that some academics have perceptions of ‘language’ that are quite different to those of community members, whose voice they are trying to represent in our research. A number of respondents took part in the adapted sign language survey, who are both academics *and* members of a sign language community, and we hope that the number of deaf scholars in this field will continue to grow.

The scoring of sign language vitality so far has seemed to highlight the fact that quantitatively studying this complex phenomenon provides a starting point for more robust assessments of individual languages. In order to reflect the unique situation of a language community, the scoring process should take more account of the community’s own perspectives and be supplemented with a mixed-methods assessment (e.g. McKee, 2017), possibly with weighted factors. We made some observations about the new UNESCO survey for spoken *and* signed languages released in 2018, including its use of binary classifications and a globalist ideology. For the purposes of comparability and awareness raising, the new UNESCO survey is valuable, but it is hoped that the questionnaire for sign languages can be made available in a sign language, so that it is more accessible to deaf communities. More active facilitation of signers’ involvement in vitality research and less emphasis on the notion of languages as bounded entities might enable a greater focus on deaf communities’ language beliefs and practices.

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References

- Albury, Nathan John. 2015. Objectives at the crossroads: Critical theory and self-determination in indigenous language revitalization. *Critical Inquiry in Language Studies* 12(4): 256–282. doi:10.1080/15427587.2015.1096732
- Baker, Colin. 1992. *Attitudes and language*. Clevedon, UK: Multilingual Matters.
- Blommaert, Jan, ed. 1999. *Language ideological debates*. Language, Power, and Social Process 2. Berlin: Mouton de Gruyter.
- Blommaert, Jan. 2001. The Asmara Declaration as a sociolinguistic problem: Reflections on scholarship and linguistic rights. *Journal of Sociolinguistics* 5(1): 131–155.

- Bloomfield, Leonard. 1933. *Language*. New York: Henry Holt.
- Braithwaite, Ben. 2019. Sign language endangerment and linguistic diversity. *Language* 95(1): 161–187.
- Brennan, Mary. 2003. Deafness, disability and inclusion: The gap between rhetoric and practice. *Policy futures in education* 1(4): 668–685.
- Cameron, Deborah. 2008. Language endangerment and verbal hygiene: History, morality and politics. In Alexandre Duchêne & Monica Heller (eds.), *Discourses of endangerment: Ideology and interest In the defence of languages (Advances in Sociolinguistics)* (pp. 268–285). London: Continuum.
- Chomsky, Noam. 1957. *Syntactic structures*. The Hague: Mouton.
- Collins, James T. 1998. Our ideologies and theirs. In Bambi B. Schieffelin, Kathryn A. Woolard, & Paul V. Kroskrity (eds.), *Language ideologies* (pp. 256–270). New York: Oxford University Press.
- Coupland, Nikolas. 2010. The authentic speaker and the speech community. In Carmen Llamas & Dominic Watt (eds.), *Language and identities* (pp. 99–112). Edinburgh: Edinburgh University Press.
- Cormier, Kearsy, Adam Schembri, David Vinson, & Eleni Orfanidou. 2012. First language acquisition differs from second language acquisition in prelingually deaf signers: Evidence from sensitivity to grammaticality judgement in British Sign Language. *Cognition* 124(1): 50–65.
- Davies, Alan. 1991. *The native speaker in applied linguistics*. Edinburgh: Edinburgh University Press.
- De Meulder, Maartje. 2017. Promotion in times of endangerment: The Sign Language Act in Finland. *Language Policy* 16: 189–208.
- De Meulder, Maartje. 2019. “So, why do you sign?” Deaf and hearing new signers, their motivation, and revitalisation policies for sign languages. *Applied Linguistics Review* 10(4): 705–724.
- De Meulder, Maartje, Annelies Kusters, Erin Moriarty, & Joseph J. Murray. 2019. Describe, don’t prescribe: The practice and politics of translanguaging in the context of deaf signers. *Journal of Multilingual and Multicultural Development* 2(2): 1–15. doi:10.1080/01434632.2019.1592181
- De Meulder, Maartje, Joseph J. Murray & Rachel McKee, Eds. 2019. *The legal recognition of sign languages: Advocacy and outcomes around the world*. Channel View Publications.
- Dorian, Nancy C. 1994. Varieties of variation in a very small place: Social homogeneity, prestige norms, and linguistic variation. *Language* 70(4): 631–696.
- Dotter, Franz, Verena Krausneker, Helene Jarmer, & Lukas Huber. 2019. Austrian Sign Language: Recognition achieved but discrimination continues. In Maartje De Meulder, Joseph J. Murray and Rachel McKee (Eds.), *The legal recognition of sign languages: Advocacy and outcomes around the world* (pp. 209–223). Bristol: Multilingual Matters.
- Duchêne, Alexandre & Monica Heller, eds. 2008. *Discourses of endangerment: Ideology and interest In the defence of languages (Advances in Sociolinguistics)*. London: Continuum.
- Eichmann, Hanna. 2009. Planning sign languages: Promoting hearing hegemony? Conceptualizing sign language standardization. *Current Issues in Language Planning* 10(3): 293–307.

Escobedo Delgado, Cesar Ernesto. 2012. Chican Sign Language: A sociolinguistic sketch. In Ulrike Zeshan & Connie De Vos (eds.), *Sign languages in village communities: Anthropological and linguistic insights*, 377–380. Berlin: De Gruyter Mouton.

Fishman, Joshua A. 1991. *Reversing language shift*. Clevedon: Multilingual Matters.

Gal, Susan. 1998. Multiplicity and contention among language ideologies: A commentary. In Bambi B. Schieffelin, Kathryn A. Woolard, & Paul V. Kroskrity (eds.), *Language ideologies* (pp. 317–331). New York: Oxford University Press.

Garrett, Peter. 2010. *Attitudes to language*. Key topics in sociolinguistics. Cambridge, UK: Cambridge Univ. Press. DOI: 10.1017/CBO9780511844713

Green, Elizabeth Mara. 2014. The nature of signs: Nepal's deaf society, local sign, and the production of communicative sociality. Berkeley: University of California, PhD dissertation.

Groce, Nora Ellen. 1985. *Everyone here spoke sign language: Hereditary deafness on Martha's Vineyard*. Cambridge, MA: Harvard University Press.

Haualand, Hilde. 2009. Sign language interpreting: A human rights issue. *International Journal of Interpreter Education* 1: 95–110.

Haviland, John B. 2013. The emerging grammar of nouns in a first generation sign language: Specification, iconicity, and syntax. *Gesture* 13(3): 309–353.

Heller, Monica. 2004. Analysis and stance regarding language and social justice'. In Jane Freeland & Donna Patrick (Eds.), *Language rights and language survival: Sociolinguistic and sociocultural perspectives* (pp. 283–286. Manchester, UK: St. Jerome.

Heller, Monica & Alexandre Duchêne. 2008. Discourses of endangerment: Sociolinguistics, globalization and social order. In Alexandre Duchêne & Monica Heller (eds.), *Discourses of endangerment: Ideology and interest In the defence of languages (Advances in Sociolinguistics)* (pp. 1–13). London: Continuum.

INALI (*Instituto Nacional de Lenguas Indígenas*, National Indigenous Languages Institute). 2012. Mexico's indigenous national languages: At risk of disappearance. Available at: https://site.inali.gob.mx/pdf/libro_lenguas_indigenas_nacionales_en_riesgo_de_desaparicion.pdf

Johnson, Robert E. 1991. Sign language, culture, and community in a traditional Yucatec Maya village. *Sign Language Studies* 73. 461–474.

Jourdan, Christine, & Johanne Angeli. 2014. Pijin and shifting language ideologies in urban Solomon Islands. *Language in Society* 43: 265–285.

King, Kendall A. & Mary Hermes. 2014. Why is this so hard?: Ideologies of endangerment, passive language learning approaches, and Ojibwe in the United States. *Journal of Language, Identity & Education* 13(4): 268–282. doi: 10.1080/15348458.2014.939029

Kroskrity, Paul V. 2004. Language ideologies. In Alessandro Duranti (Ed.), *A companion to linguistic anthropology* (pp. 496–517). Oxford: Blackwell.

Kisch, Shifra. 2012. Demarcating generations of signers in the dynamic sociolinguistic landscape of a shared sign-language: The case of the Al-Sayyid Bedouin. In Ulrike Zeshan & Connie De Vos (eds.), *Sign languages in village communities: Anthropological and linguistic insights* (pp. 87–126). Berlin: De Gruyter Mouton and Nijmegen: Ishara Press.

Kubota, Ryuko. 2014. The multi/plural turn, postcolonial theory, and neoliberal multiculturalism: Complicities and implications for applied linguistics. *Applied Linguistics* 37(4): 474–94.

Kurz, Christopher A.N., Jeanne E. Reis & Barbara Spiecker. 2020. Ideologies and attitudes toward American Sign Language: Processes of academic language and academic vocabulary coinage. In Annelies Kusters, Mara Green, Erin Moriarty Harrelson, & Kristin Snoddon (Eds.), *Sign language ideologies in practice* (pp. 287–308). Berlin: De Gruyter Mouton and Nijmegen: Ishara Press.

Kusters, Annelies. 2010. Deaf utopias? Reviewing the sociocultural literature on the world's 'Martha's Vineyard situations'. *The Journal of Deaf Studies and Deaf Education* 15(1), 3–16.

Kusters, Annelies. 2014. Language ideologies in the shared signing community of Adamorobe. *Language in Society* 43(2). 139–158. doi:10.1017/S0047404514000013.

Kusters, Annelies, Massimiliano Spotti, Ruth Swanwick & Elina Tapio. 2017. Beyond languages, beyond modalities: transforming the study of semiotic repertoires. *International Journal of Multilingualism* 14(3): 219–232. doi: 10.1080/14790718.2017.1321651

Kusters, Annelies & Sujit Sahasrabudhe. 2018. Language ideologies on the difference between gesture and sign. *Language & Communication* 60, 44–63.

Ladd, Paddy. 2003. *Understanding deaf culture: In search of Deafhood*. Clevedon, England: Multilingual Matters.

Le Guen, Olivier. 2012. An exploration in the domain of time: from Yucatec Maya time gestures to Yucatec Maya Sign Language time signs. In Ulrike Zeshan & Connie De Vos (eds.), *Sign languages in village communities: Anthropological and Linguistic Insights*, 209–250. Berlin: De Gruyter Mouton.

Le Guen, Olivier, Rebeca Petatillo Balam & Rita Kinil Canché. In press. Yucatec Maya multimodal interaction as a basis for Yucatec Maya Sign Language. In Olivier Le Guen, Josefina Safar & Marie Coppola (eds.), *Emerging sign languages of the Americas*. Berlin: De Gruyter Mouton.

LeMaster, Barbara & Monaghan, Leila. 2004. Variation in sign languages. In Alessandro Duranti (ed.), *A companion to linguistic anthropology* (pp. 141–165). Oxford: Blackwell.

- Maffi, Luisa. 2005. 'Linguistic, cultural and biological diversity. *Annual Review of Anthropology* 29, 599–617.
- Makoni, Sinfree, & Alastair Pennycook, eds. 2006. *Disinventing and reconstituting languages*. Clevedon: Multilingual Matters.
- Marsaja, I Gede. 2008. *Desa Kolok: A deaf village and its sign language in Bali, Indonesia*. Nijmegen: Ishara Press.
- May, Stephen. 2011. *Language and minority rights: Ethnicity, nationalism and the politics of language*. London: Routledge.
- McKee, Rachel. 2017. Assessing the vitality of New Zealand Sign Language. *Sign Language Studies* 17(3): 322–362.
- McKee, Rachel & Victoria Manning. 2015. Evaluating effects of language recognition on language rights and the vitality of New Zealand Sign Language. *Sign Language Studies* 15(4): 473–497.
- McKee, Rachel & Victoria Manning. 2019. Implementing recognition of New Zealand Sign Language: 2006–2018. In Maartje De Meulder, J.J. Murray and Rachel McKee (eds.), *The legal recognition of sign languages: Advocacy and outcomes around the world* (pp. 224–237). Bristol: Multilingual Matters.
- Mesh, Kate & Lynn Hou. In press. Negation in San Juan Quiahije Chatino Sign Language: The Integration and Adaptation of Negative Emblems.
- Moriarty Harrelson, Erin. 2017. Deaf people with “no language”: Mobility and flexible accumulation in languaging practices of deaf people in Cambodia. *Applied Linguistics Review* 10(1). Online: <https://doi.org/10.1515/applirev-2017-0081>.
- Muehlmann, Shaylih. 2008. Defending diversity: Staking out a common global interest? In Alexandre Duchêne & Monica Heller (eds.), *Discourses of endangerment: Ideology and interest in the defence of languages (Advances in Sociolinguistics)* (pp. 14–34). London: Continuum.
- Muehlmann, Shaylih. 2012. Von Humboldt’s parrot and the countdown of last speakers in the Colorado Delta. *Language & Communication* 32(2): 160–168.
- Murray, Joseph. 2015. Linguistic human rights discourse in deaf community activism. *Sign Language Studies* 15(4): 379–410.
- Murray, Joseph. 2020. Ideology, authority, and power. In Annelies Kusters, Mara Green, Erin Moriarty Harrelson, & Kristin Snoddon (eds.), *Sign language ideologies in practice* (pp. 333–352). Berlin: De Gruyter Mouton and Nijmegen: Ishara Press.
- Murray, Joseph J., Wyatt C. Hall, & Kristin Snoddon. 2019. Education and health of children with hearing loss: The necessity of signed languages. *Bull World Health Organ* 97: 711–716.
- Padden, Carol. 2001. Folk explanation in language survival. In Lois Bragg (Ed.) *Deaf World: A historical reader and primary sourcebook*. New York: New York University Press.
- Padden, Carol & Tom Humphries. 2006. *Inside deaf culture*. Cambridge, MA: Harvard University Press.

Pennycook, Alastair. 2010. *Language as a local practice*. New York: Routledge.

PINALI (*El Programa institucional del INALI*). 2009. *Programa de revitalización, fortalecimiento y desarrollo de las lenguas indígenas nacionales 2008-2012*. Available at: <https://www.inali.gob.mx/pdf/PINALI-2008-2012.pdf>

Safar, Josefina & Olivier Le Guen. In press. Yucatec Maya Sign Language. A sociolinguistic overview. In Olivier Le Guen, Josefina Safar & Marie Coppola (eds.), *Emerging sign languages of the Americas*. Berlin: De Gruyter Mouton.

Safar, Josefina & Jenny Webster. 2014. Cataloguing endangered sign languages at iSLanDS. iSLanDS's blog: Live reports from the International Institute for Sign Languages and Deaf Studies (iSLanDS) [online]. Available at: https://islandscentre.files.wordpress.com/2014/08/report-endangered-sls_070814.pdf. [Accessed 22 January 2019.]

Safar, Josefina. 2017. Translanguaging in Yucatec Maya signing communities. *Applied Linguistics Review*. doi:10.1515/applirev-2017-0082

Safar, Josefina. 2015. Eine Analyse von Diskursen über Chicán Sign Language (Mexiko). *Das Zeichen* 101(1). 434–446.

Sallabank, Julia. 2018. Language planning and language ideologies in Guernsey. *Multilingua* 38. 10.1515/multi-2018-0002.

Shuman, Malcolm K. 1980. The sound of silence in Nohya: A preliminary account of sign language use by the deaf in a Maya community in Yucatan, Mexico. *Language Sciences* 2(1): 144–173.

Schneider, Cindy. 2018. Ideologies, practices, and their effect on dialect vitality: A case study from Vanuatu. *Journal of Multilingual and Multicultural Development* 39(1): 60–75. doi: 10.1080/01434632.2017.1311904

Sharrock, Wesley. 1974. On owning knowledge. In Roy Turner (ed.), *Ethnomethodology: Selected readings* (pp. 45–53). Harmondsworth: Penguin.

Sign Language Linguistics Society. 2016. SLLS ethics statement for sign language research. Available at: <https://slls.eu/slls-ethics-statement/> [Accessed on 23 November 2019.]

Silverstein, Michael. 1979. Language structure and linguistic ideology. In P. Clyne, W. Hanks, & C. Hofbauer (eds.), *The elements* (pp. 193–248). Chicago: Chicago Linguistic Society.

Skutnabb-Kangas, Tove, & Robert Phillipson. 2010. The global politics of language: Markets, maintenance, marginalization, or murder? In Nikolas Coupland (Ed.), *The handbook of language and globalization* (pp. 77–100). Oxford: John Wiley & Sons.

Snoddon, Kristin. 2008. American sign language and early intervention. *Canadian Modern Language Review* 64(4): 581–604.

Snoddon, Kristin. 2009. Equity in education: Signed language and the courts. *Current Issues in Language Planning* 10(3): 279–295.

Turner, Graham H. 1995. Contact signing and language shift. In Heleen Bos & Trude Shermer (eds.), *Sign language research 1994: Proceedings of the Fourth European Congress on Sign Language Research in Munich* (pp. 211–229). Hamburg: Signum Press.

UNESCO Ad Hoc Expert Group on Endangered Languages. 2003. Language vitality and endangerment. Document submitted to the International Expert Meeting on UNESCO Programme Safeguarding of Endangered Languages, Paris, 10–12 March. Available at: http://www.unesco.org/new/fileadmin/MULTIMEDIA/HQ/CLT/pdf/Language_vitality_and_endangerment_EN.pdf. [Accessed 18 November 2019.]

UNESCO & iSLanDS (the International Institute for Sign Languages and Deaf Studies). 2011. Adapted Survey: Linguistic Vitality and Diversity of Sign Languages. *iSLanDS Institute, University of Central Lancashire* [online]. Available at: https://www.uclan.ac.uk/research/explore/projects/assets/UNESCO_Questionnaire_v5.doc. [Accessed 22 January 2019.]

UNESCO. 2018. UNESCO questionnaire on sign languages. *UNESCO* [online]. Available at: <http://uis.unesco.org/en/files/unesco-questionnaire-world-languages-sign-2018-en-xlsx>. [Accessed 22 January 2019.]

Walsh, Michael. 2010. Why language revitalisation sometimes works. In John Hobson, Kevin Lowe, Susan Poetsch & Michael Walsh (eds.), *Re-awakening languages: Theory and practice in the revitalisation of Australia's indigenous languages* (pp. 22–36). Sydney: Sydney University Press.

Weber, Joanne. 2020. Interrogating sign language ideologies in the Saskatchewan deaf community: An autoethnography. In Annelies Kusters, Mara Green, Erin Moriarty Harrelson, & Kristin Snoddon (eds.), *Sign language ideologies in practice* (pp. 23–39). Berlin: De Gruyter Mouton and Nijmegen: Ishara Press.

Webster, Jenny & Josefina Safar. 2019. Scoring sign language vitality: Adapting a spoken language survey to target the endangerment factors affecting sign languages. *Language Documentation & Conservation* 13: 346–383.

Zeshan, Ulrike & Connie de Vos. (eds.) 2012. *Sign languages in village communities: Anthropological and linguistic insights*. Sign Language Typology Series No. 4. Berlin: De Gruyter Mouton and Nijmegen: Ishara Press.

Zeshan, Ulrike, Cesar Ernesto Escobedo Delgado, Hasan Dikyuva, Sibaji Panda & Connie De Vos. 2013. Cardinal numerals in rural sign languages: Approaching cross-modal typology. *Linguistic Typology* 17(3): 357–396.