Introduction: Demographic, sociocultural, and linguistic variation across rural signing communities

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This book unites the work of both anthropologists and linguists who have conducted fieldwork in rural signing communities around the globe. In most cases, these signing communities have emerged in response to a high incidence of (often hereditary) deafness. In contrast to the national sign languages used in urban deaf communities, these indigenous sign languages are typically shared between deaf and hearing community members, thus facilitating a high degree of integration between deaf and hearing individuals. This volume represents the largest collection of comparative work across such "deaf villages" to date.

There have been sporadic publications on these communities over the past few decades (see for instance Kakumasu, 1968; Washabaugh, 1979; Groce, 1985), but the chapters in this volume constitute the first extensive compilation of academic papers regarding these signing varieties and the communities in which they have emerged, from both anthropological and linguistic perspectives. Moreover, for some of the signing varieties discussed here, this is the first printed publication to appear (see the community sketches by Dikyuva; Lanesman & Meir, and Panda in Part II of this volume).

All known village sign languages are endangered, usually because of pressure from larger urban sign languages, and some have died out already. Ironically, it is often the success of the larger sign language communities in urban centres, their recognition and subsequent spread, which leads to the endangerment of these small minority sign languages. For this reason the book also addresses this specific type of language endangerment, documentation strategies, and other ethical issues.

The sections below serve as an introduction to the demographic, sociocultural, and linguistic diversity that is represented in this book. Results from the chapters of this volume are contextualised by describing some commonalities across the various sites and languages, as well as, most importantly, highlighting the unique findings reported in each of them.

1. The social dynamics of rural signing communities

The notion of a "deaf village" is closely related to the concepts of a "sharedsigning community" (Kisch 2008), an "assimilative Deaf community" (Groce 1985), and a "speech/sign community" (Nonaka 2007). Alternative terms in the literature for village sign languages are "indigenous sign language" (Woodward 2003; Nonaka 2009) and "rural sign language" (de Vos 2011). Moreover, a term sometimes related to village sign languages, but nonetheless distinct, is "emerging sign language," used to indicate a broader category of sign languages that have emerged within the last two or three generations (Padden 2010). Each of the latter terms underscores a different aspect of sign languages that have emerged in rural communities.

The table below is based on the community sketches in Part II of this volume and summarises a few of the relevant dimensions along which "deaf villages" may vary. The variation found across these communities suggests that "deaf villages" are far from homogeneous. Moreover, as Nonaka (this volume) points out, dichotomies may be motivated by whichever dimension is taken to be relevant to the phenomenon under consideration. With this in mind, this volume has taken a liberal approach to terminology, and the above terms are used largely interchangeably, until we arrive at better-informed classifications.

A number of differences between the communities discussed here stand out in particular. First of all, the rural signing communities featuring this book often do not constitute the classical "deaf village" scenario. Mardin Sign Language was never used by the entire town of Mardin, but has rather functioned as the family sign language for the *Dilsiz* family and their particular social networks in Mardin. The Turkish word dilsiz means 'deaf', which is perhaps unsurprising given the fact that this family has had deaf members for the past four generations. The emergence of the AJSL signing community in Ghardaia, Algeria was followed by successive waves of emigration in the 1940s and 1950s. While Algerian Jewish Sign Language (Lanesman & Meir, this volume) thus first arose in a Jewish enclave of Algeria, the community has been in a state of diaspora and its members are now dispersed in Israel and France. Yolngu Sign Language (Maypilama & Adone, this volume) stands out from the other village sign languages described in the literature, as it is better known as the "alternate sign language" of the Yolngu aboriginal community. Within multiple aboriginal communities, alternate sign languages are used in situations of speech taboos, for instance during mourning, or during hunting (Kendon 1988). Within the Yolngu case, this signed form of communication

Table 1. Overview of rural signing communities.

| | GEOGRAPHY | SIZE OF | CAUSES OF | TIME | CONTEXTS OF | RISK FACTORS |
|-------------|--------------------------|--------------------------------|------------|--------------|----------------------------------|---------------------------|
| | | SIGNING | DEAFNESS | DEPTH | LANGUAGE USE | |
| | | COMMUNITY | | | | |
| ADAMOROBE | Village of | 35-45 deaf signers | Hereditary | 200 years | All aspects of village life | Language contact with |
| SIGN | Adamorobe, | | | | | GSL |
| LANGUAGE | Ghana | | | | | |
| ALIPUR SIGN | Village of | 150 deaf signers | Hereditary | At least 6 | Social, professional and | Introduction of ASL |
| LANGUAGE | Alipur, India | | | generations | educational settings (local deaf | |
| | | | | | education since 2008) | |
| AL-SAYYID | Village of Al | 130 deaf signers; | Hereditary | 90 years | All aspects of village life | Language contact with |
| BEDOUIN | Sayyid, Negev, | approximately 700 | | | | ISL; changing marital |
| SIGN | Israel | hearing signers | | | | patterns |
| LANGUAGE | | | | | | |
| ALGERIAN | Currently spread Unknown | Unknown | Hereditary | Unknown | In the home and at family | Language contact with |
| JEWISH SIGN | across areas | | | | gatherings | ISL; low prestige; |
| LANGUAGE | of Israel and | | | | | changing marital patterns |
| | France | | | | | |
| BAN KHOR | Village of Ban | 24 deaf signers and Hereditary | Hereditary | First cohort | All aspects of village life | Language contact with |
| SIGN | Khor, Thailand | approximately 400 | | of 2 deaf | | TST |
| LANGUAGE | | hearing signers | | signers in | | |
| | | | | the 1930s | | |

| ying ying ying Hereditary cearing cearing cearing sarying syarying syarying syarying syarying cordeaf soft deaf cordeaf soft deaf cordeaf soft deaf cordeaf signers | CHICAN SIGN | Village of | 17 deaf signers; | Unknown | Three | All aspects of village life | Language contact with |
|--|-------------|------------------|---------------------|------------|-------------|-----------------------------------|---------------------------|
| KOLOK Vucatec, Mexico signers (varying) proficiency) Five KOLOK Used in two 46 deaf; More Hereditary Five neighbouring than 1,200 hearing Hereditary Five North Bali: proficiencies) Antilages of Top Only a few elderly, Unknown Unknown Unkown Hill, Jamaica deaf monolingual signers Signers Anthony Unknown SIGN Sign language 47 deaf individuals Unknown Unknown UAGE used across vast use IUR as a Anthony Currently used 40 deaf and Hereditary Four IN Currently used 40 deaf and Hereditary Four In Istanbul and hearing signers in generations INUAGE Izmir (Turkey) an extended family Arnhemland Arnhemland Individuals in Arnhemland Individuals in Arnhemlany Individuals in Individuals in | LANGUAGE | Chican in | 332 hearing | | generations | | LSM |
| KOLOKUsed in two46 deaf; MoreHereditaryFiveneighbouringthan 1,200 hearingFivevillages ofsigners (of varyingof deafNorth Bali:proficiencies)signersHRIVillage of TopOnly a few elderly, signersUnknownUnkownVIII Jamaicadeaf monolingualvillage of TopUnknownVIII Jamaica47 deaf individualsUnknownUnknownVIAGEused across vastuse IUR as aCanadaJINCurrently used40 deaf andHereditaryFourcanadain Istanbul andhearing signers ingenerationsviAGEIzmir (Turkey)an extended familyof deafnessviNUGaliwin'ku,5 deaf signersNon-UnkownchAGEindividuals inhereditaryUnkown | | Yucatec, Mexico | | | of deaf | | |
| KOLOKUsed in two46 deaf; MoreHereditaryFiveneighbouringthan 1,200 hearinggenerationsvillages ofsigners (of varying)of deafNorth Bali:proficiencies)signersSHRIVillage of TopOnly a few elderly, signersUnknownUnkownHill, Jamaicadeaf monolingualUnknownUnknownSIGNSign language47 deaf individualsUnknownUnknownUAGEused across vastuse IUR as acommunicationCanadaOranadacommunicationHereditaryFourLAGEIzmir (Turkey)an extended familycontactionsSUAGEIzmir (Turkey)an extended familycontactionsSUAGEImprividuals incontactionsSUAGEindividuals incontactions | | | proficiency) | | signers | | |
| neighbouring than 1,200 hearing generations villages of signers (of varying bengkala & Bila Bengkala & Bila Bengkala & Bila Bengkala & Bila Signers (of varying bengkala & Bila Bengkala & Bila Bengkala & Bila Signers Hill, Jamaica deaf monolingual signers SIGN Sign language 47 deaf individuals Unknown Unknown geographical primary mode of distances of communication Canada JIN Currently used 40 deaf and Hereditary Four in Istanbul and hearing signers in in Istanbul and hearing signers in Arnhemland and 70 hearing signers in Arnhemland and 70 hearing hereditary hereditary Calaixin, Jun Arnhemland individuals in the signer of the signers in the signer of | KATA KOLOK | Used in two | 46 deaf; More | Hereditary | Five | Social, professional, liturgical, | Language contact with |
| villages of signers (of varying North Bali: proficiencies) aigners Bengkala & Bila CHRI Village of Top Only a few elderly, Unknown Hill, Jamaica deaf monolingual signers SIGN Sign language 47 deaf individuals Unknown Unknown geographical primary mode of distances of communication Canada OIN Currently used 40 deaf and Hereditary Four in Istanbul and hearing signers in in Istanbul and hearing signers in Arnhemland and 70 hearing in Arnhemland and 70 hearing in Hereditary Calaixin, Jun Arnhemland and 70 hearing in Hereditary Calaixin, Jun CARIAGE Imiri (Turkey) an extended family hereditary and Arnhemland and 70 hearing in Hereditary Calaixin, Jun CARIAGE Imiri (Turkey) an extended family hereditary Calaixin, Jun CARIAGE Imiri (Turkey) an extended family hereditary and Arnhemland and 70 hearing in Hereditary hereditary | | neighbouring | than 1,200 hearing | | generations | and educational settings (local | IndoSL; low prestige; |
| HRI Village of Top Only a few elderly, Unknown Unkown Hill, Jamaica deaf monolingual signers SIGN Sign language 47 deaf individuals Unknown Unknown used across vast use IUR as a geographical primary mode of distances of communication Canada JIN Currently used 40 deaf and Hereditary Four in Istanbul and hearing signers in Arnhemland and 70 hearing in Hereditary Unkown Arnhemland and 70 hearing in Hereditary Unkown individuals in the caliary of Caliavin's Language And Anthemland and 70 hearing in Hereditary Caliavin's Language and 70 hearing in Hereditary Unkown Caliavin's Language and 70 hearing in Hereditary Unkown Individuals in the caliary individuals individuals in the caliary individuals individu | | villages of | signers (of varying | | of deaf | deaf education established in | changing marital patterns |
| HRI Village of Top Only a few elderly, Unknown Unkown Hill, Jamaica deaf monolingual signers SIGN Sign language 47 deaf individuals Unknown Unknown geographical primary mode of distances of communication Canada JIN Currently used 40 deaf and Hereditary Four in Istanbul and hearing signers in Stanbul and hearing signers in Arnhemland and 70 hearing hereditary Calaiwin'ku, 5 deaf signers in Arnhemland individuals in Arnhemland i | | North Bali: | proficiencies) | | native | 2007) | |
| Hill, Jamaica deaf monolingual signers SIGN Sign language 47 deaf individuals Unknown Unknown geographical primary mode of distances of communication Canada JN Currently used (40 deaf and mostered family and standary mostered family generations in Istanbul and hearing signers in Arnhemland and 70 hearing in Pereditary (10 Chkown Arnhemland and 70 hearing) hereditary (10 Chkown individuals in the control of the co | | Bengkala & Bila | | | signers | | |
| Hill, Jamaica deaf monolingual signers SIGN Sign language 47 deaf individuals Unknown Unknown geographical primary mode of distances of communication Canada JIN Currently used 40 deaf and Hereditary Four in Istanbul and hearing signers in Istanbul and hearing signers in Arnhemland and 70 hearing Ron- Unkown Arnhemland and 70 hearing in Individuals in Individuals in Istanbul and Arnhemland and 70 hearing Reditary Scaliswin-Yun | KONCHRI | Village of Top | Only a few elderly, | Unknown | Unkown | At home, in church | Language is moribund |
| signers SIGN Sign language 47 deaf individuals Unknown Unknown geographical primary mode of distances of communication Canada JIN Currently used 40 deaf and Hereditary Four in Istanbul and hearing signers in Arnhemland and 70 hearing signers in Arnhemland and 70 hearing in Hereditary Unkown Arnhemland and 70 hearing in Hereditary Calixin, Jun | SAIN | Hill, Jamaica | deaf monolingual | | | | due to long term contact |
| Sign language 47 deaf individuals Unknown used across vast use IUR as a geographical primary mode of distances of communication Canada JIN Currently used 40 deaf and Hereditary Four in Istanbul and hearing signers in in Istanbul and hearing signers in Arnhemland and 70 hearing in Hereditary Unkown Arnhemland and 70 hearing in Hereditary Chrown Individuals in Individuals Ind | | | signers | | | | with JSL |
| geographical primary mode of distances of communication Canada JIN Currently used 40 deaf and Hereditary Four in Istanbul and hearing signers in stanbul and hearing signers in Arnhemland and 70 hearing needitary an extended family of deafness in Arnhemland and 70 hearing hereditary caliwin to Galiwin to G | INUIT SIGN | Sign language | 47 deaf individuals | Unknown | Unknown | At home | Language contact with |
| geographical primary mode of distances of communication Canada JIN Currently used 40 deaf and Hereditary Four in Istanbul and hearing signers in generations in Istanbul and hearing signers in of deafness in Galiwin'ku, 5 deaf signers Arnhemland and 70 hearing hereditary individuals in Callavin's Lan | LANGUAGE | used across vast | use IUR as a | | | | ASL |
| distances of communication Canada UN Currently used 40 deaf and Hereditary Four in Istanbul and hearing signers in generations UAGE Izmir (Turkey) an extended family of deafness UN Galiwin'ku, 5 deaf signers Non- Unkown Arnhemland and 70 hearing hereditary Galiwin'ku, Galiwin'ku, Galiwin'ku, Caliwin'ku, Caliwin'ku | | geographical | primary mode of | | | | |
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| in Istanbul and hearing signers in Istanbul and Turkey) an extended family of deafness in Istanbul and 70 hearing hereditary individuals in Istanbul and Turkey in Istanbul and Turkey in Istanbul and Turkey in Istanbul and Turk | | Canada | | | | | |
| in Istanbul and hearing signers in generations UAGE Izmir (Turkey) an extended family of deafness Unkown Arnhemland and 70 hearing hereditary individuals in | MARDIN | Currently used | 40 deaf and | Hereditary | Four | In the home and at family | Geographical dispersion; |
| Izmir (Turkey) an extended family of deafness Galiwin'ku, 5 deaf signers Non- Unkown Arnhemland and 70 hearing hereditary individuals in | SIGN | in Istanbul and | hearing signers in | | generations | gatherings | Language contact with |
| Arnhemland and 70 hearing hereditary individuals in | LANGUAGE | Izmir (Turkey) | an extended family | | of deafness | | TID |
| Arnhemland and 70 hearing hereditary in dividuals in Galiwin 201 | VOLGNU | Galiwin'ku, | 5 deaf signers | Non- | Unkown | Alternate sign language of | Language contact with |
| individuals in Galiwin ^s Ly | SIGN | Arnhemland | and 70 hearing | hereditary | | hearing community members; | Auslan |
| | LANGUAGE | | individuals in | | | primary communication system | |
| | | | Galiwin'ku | | | for deaf Yolgnu | |

has also been adopted by a small group of deaf individuals who use it as their primary means of communication, and there has not been a systematic study of the potential contrasts between these two domains of use to date (Maypilama & Adone, this volume). The origins and modes of transmission of Inuit Sign Language are as yet unclear (Schuit, this volume), but its vast geographical spread suggests that it might have emerged from a form of gestural communication shared by hearing Inuit, perhaps even a trading language such as Plains Indian Sign Language (Davis 2010).

The dichotomy between urban and rural sign languages is primarily based on their distinctive origins: segregated formal deaf education, and informal shared sign language use, respectively. The above cases, however, indicate that rural signing varieties may be differentiated even further in terms of their historical development and geographical spread. Furthermore, Nyst (this volume) notes that our current jargon is inadequate for identifying the wider range of signing varieties that exists in rural Mali. Some of the sign languages found in Africa (e.g. Bamako Sign Language of Mali) have emerged outside the context of formal deaf education, but within extensive urban networks. Future classifications and comparisons of these different types of signing varieties could lead to a deeper understanding of the relationship between social dynamics of signing communities and their linguistic structures. For instance, section 2 of this introduction touches upon cross-modal contact between the types of sign languages and the spoken languages that surround them.

A final issue which arises from the variation reported in the community sketches is that, although the majority of sign languages under consideration here are used in delineated "villages", this term has little descriptive value from an anthropological point of view. This is particularly evident when comparing the demographic figures of the "villages" of Alipur, with 20,000 individuals, and Chican, which has a population of 720. Alipur village also stands out as one of the wealthier communities with a flourishing gem-stone industry, which has enabled the construction of large buildings and the establishment of a locally-funded deaf school. As noted by Nonaka (this volume), most of the communities under consideration here have labor-intensive economies which include agricultural activities, and in most communities, deaf and hearing community members hold similar occupations. However, differential education opportunities allow hearing villagers to hold professional jobs outside the community additionally (Escobedo Delgado, this volume).

The communities listed here are characterised by the existence of a sign language shared between deaf and hearing community members. The use of signed communication in everyday activities appears to facilitate a high degree of integration of deaf and hearing community members. The

communicative ease with which deaf individuals function within these rural communities has sometimes led to a naive conception of these villages as Deaf utopias (see Kusters, 2010; this volume). The sketches presented in Part II of this volume aim to fully appreciate the various sociocultural adaptations and views on deafness that are held within these communities.

The differential social construction of deafness in these communities becomes particularly clear in the domain of partner choice and wedding arrangements. In the villages of Bengkala and Chican, deaf individuals are free to choose a deaf or hearing spouse and both deaf-deaf and deaf-hearing marriages are attested (Marsaja 2008; Escobedo Delgado this volume). In Adamorobe, deaf individuals have not been allowed to mary each other since 1975, because these marriages invariably led to deaf offspring (Kusters, this volume). In Alipur, wedding arrangements traditionally involve financial transactions, but there are significant differences in the costs between hearing and deaf-hearing weddings. The family marrying off a deaf woman pays a higher dowry than if they had had a hearing daughter. Furthermore, hearing men do not pay dowries when they marry a deaf woman, while deaf men do (see Panda, this volume for details). In the case of Al-Sayyid, arranged marriages are also the norm, and all of those marriages were mixed, until a deaf Al-Sayyid woman married her deaf classmate from outside Al-Sayyid in 2004. Since then there has been a steep increase of deaf Al-Sayyid women marrying deaf men from elsewhere, a process which has been facilitated by networks that, being based in educational settings, include the wider Israeli deaf community (Kisch, this volume). Similarly, in the case of Bengkala, attendance at deaf schools in other parts of Bali has led to increased contact with the wider Balinese deaf community, and subsequently a larger number of marriages between deaf men and women from Bengkala with deaf individuals who are not from this village. As deaf individuals from outside of these villages are unlikely to carry the same recessive gene causing deafness within these communities, such couples do not usually bear deaf offspring. Consequently, these changing marital patterns may reduce the incidence of deafness within these villages, and threaten the continued use of the indigenous sign language in the long run (de Vos, this volume).

As rightmost column of Table 1 illustrates, the rural sign languages included in this volume are all either endangered or at risk of becoming endangered to varying degrees. Apart from changing marital patterns, language contact with the urban sign languages of national deaf communities appear to be a major risk factor. In the village of Ban Khor, Thai Sign Language is associated with increased educational and professional opportunities and better access to sign language interpreting, and therefore enjoys

a higher prestige than Ban Khor Sign Language. Over the course of a few years only, deaf signers have started to replace BKSL signs with Thai signs and are adopting signs for new concepts as well (Nonaka, this volume). A particularly interesting observation with respect to this type of endangerment is that in many of the communities represented in this volume, it is often the hearing signers who are most conservative, and who could be regarded as the safekeepers of these shared sign languages (see the contributions by de Vos; Dikyuva; Lanesman & Meir; and Nonaka).

2. The typological contribution of sign languages from rural signing communities

Having looked at the considerable demographic and sociocultural variability of sign languages in rural communities, we now turn to some of the interesting linguistic properties of the sign languages represented in this volume. Village sign languages are one of the very latest additions to the body of knowledge in sign language linguistics. Since some of these sign languages have had limited contact with other sign languages in their formative stages, and their sociolinguistic characteristics are so strikingly different from the better-known sign languages in urban deaf communities, it is not unreasonable to expect that investigating the linguistic structures of the sign languages may lead to important new discoveries.

The rationale for expecting village sign languages to add significantly to our appreciation of typological variability across sign languages is first explored in more detail in section 2.1. We then take a closer look at the linguistic and typological significance of data from village sign languages, summarising what is known so far and how these data can be situated in the wider context of sign language linguistics (section 2.2). Finally, we consider the question whether village sign languages can be said to constitute a linguistic sub-type in contrast with urban sign languages (section 2.3). Where appropriate, reference is made to the individual chapters in this volume.

2.1. Village sign languages and Sign Language Typology

The systematic comparative study of sign languages is known as Sign Language Typology (Zeshan 2004a, 2004b). This area of inquiry has become

possible over the past decade because data from genetically and geographically diverse sign languages is increasingly becoming available for comparative studies. Large-scale comparative studies across sign languages have been undertaken for the domains of negatives and interrogatives (Zeshan 2006), possessive and existential constructions (Zeshan & Perniss 2008), and semantic fields (Zeshan & Sagara, in prep.). The latter two publications include contributions on village sign languages.

It has been argued in Zeshan (2007) that our understanding of typological diversity across sign languages resembles a mosaic where new pieces are constantly being added. From the 1960s and 1970s onwards, sign language research was initially dominated by work on American Sign Language, and the largest body of literature still relates to this language. Several Western European sign languages, such as British Sign Language and German Sign Language (DGS) are also relatively well-documented by now. More recently, important work has been carried out on non-Western sign languages in urban deaf communities, such as, for instance, in Jordan (Hendriks 2008), Hong Kong (Tang & Gu 2006), India (Zeshan 2000), Turkey (Özyürek, Zwitserlood, & Perniss 2010), Uganda (Lutalo-Kiingi forthcoming), among others. With each successive "wave" of new data, we are able to gain a clearer understanding of sign language structures around the world and to reset our perspective, which was initially skewed by emphasis on Northern American and Western European sign languages.

A parallel process of discovery has taken place in spoken language linguistics, in particular the typology of spoken languages, from the 1970s onwards. Many "exotic" languages have provided data on structures that are unusual or entirely absent from the previously prototypical Indo-European languages. For instance, recognition of mirativity and evidentiality as a grammatical category depended crucially on evidence from various "exotic" spoken languages (De Lancey 1997, Aikhenvald 2003). A similar development, albeit delayed by several decades, can now be expected for sign languages.

Thus village sign languages represent the latest addition to the mosaic of sign language structures. Detailed information about some of the linguistic structures of these sign languages has only just become available over the past few years (e.g. Nyst, 2007; Marsaja, 2008; de Vos, 2012), and their significance for comparative purposes is already apparent from such initial studies. In particular, the field of Sign Language Typology benefits immensely from data on these sign languages, and there are important conclusions for other areas of linguistic inquiry too (see section 3)

2.2. The significance of linguistic data from village sign languages

Although linguistic data from village sign languages is still relatively scarce, it has become abundantly clear already that these sign languages extend our knowledge of the linguistics of sign languages in several ways. Thus we find that village sign languages exhibit many unique structures not documented in any urban sign languages so far, as well as present counter-examples to previously presumed universal tendencies in sign languages.

A particularly important discovery that has been made in several village sign languages is that the organisation of the "signing space", i.e. the conventional space around the body use for linguistically relevant expressions during signing, is much more cross-linguistically diverse than previously thought. It has long been assumed in sign language linguistics that the rich array of grammatical spatial structures that characterises sign languages is instantiated in a very similar way in all languages in the visual-gestural modality. Constructions designating the movement and location of various categories of entities, known as "whole entity classifiers" have been shown to have a great degree of structural homogeneity across sign languages (Eccarius & Brentari 2007). Spatial verb agreement or "directionality", where the direction of hand movement indicates the grammatical / semantic roles of arguments equivalent to subject-object agreement markers in spoken languages, has been documented in many urban sign languages so far (e.g. Padden 1988; Engberg-Pedersen 1993; Mathur & Rathmann 2006; Hong 2009). Both these construction types rely on spatial conceptualisations projected onto the signing space, and it is important to localise discourse referents in signing space in order to build up notional "stage" on which discourse participants can be "placed" to act and interact. It has been argued that the semi-conventionalised contact pidgin of International Sign (IS) includes grammatically rich spatial structures because these are shared between the sign languages that IS has originated from (Supalla & Webb 1995).

However, data from village sign languages present counter-evidence to the notion that spatial structures such as directionality and classifier constructions could be universal across sign languages. Table 1 lists some features of spatial grammar across different sign languages. "X Sign Language" could stand for any previously documented urban sign language, such as Japanese Sign Language, American Sign Language, Brazilian Sign Language or Turkish Sign Language, as they all have both directional verbs and whole entity classifiers. However, the situation is different in the two village sign languages Adamorobe Sign Language (AdaSL) from Ghana and Kata Kolok

(KK) from Bali. For AdaSL, Nyst (2007) presents evidence that whole entity classifiers are not present in this language. In fact, the entire system of projecting referent entities on to the signing space in front of the signer in a "stage-like" way is not used in AdaSL. Instead of this otherwise common so-called "observer perspective" that takes a bird's eye view on the situation being described, AdaSL only uses a "character perspective" where everything is narrated from the point of view of the signer's own body (see Perniss 2007 on the distinction between the observer perspective and character perspective). AdaSL does make use of directional verbs in its grammar.

Conversely, KK has a well-developed system of whole entity classifiers. with some particularities in the use of handshape and movement patterns found in this category of signs (Marsaja 2008). Instead, KK has no systematic grammatical category of directional verbs (de Vos, 2012). This is due to a radically different organisation of grammatical signing space in KK. Unlike all other known sign languages, KK signers do not establish conceptual referent locations (known as "loci") in signing space. Instead, referents are localised in discourse according to their real-world locations. For instance, in order to refer to a person, KK signers will point to the actual physical location of the person's home in the village, rather than pointing out an arbitrary location in signing space, as is done in other sign languages. As the full grammatical use of the directionality depends on setting up conceptual loci for referents in space that can then be used as beginning and end points of the direction of verb form, KK lacks a system of directionality in verbs (de Vos 2012).

Table 2. Comparing features of spatial grammar

| Features of spatial grammar | X Sign Language | Adamorobe Sign Language | Kata Kolok |
|-----------------------------|--------------------|----------------------------|------------|
| Directional verbs | YES | YES | NO |
| Whole entity classifiers | YES | NO | YES |

AdaSL and KK thus not only present a challenge to presumed sign language universals that were posited on the basis of urban sign languages, but these two village sign languages also differ from each other in their spatial organisation. This is an important point, as it is crucial to avoid premature overgeneralisations about "urban" and "rural" sign languages. We need to consider the empirical evidence from individual rural sign languages in much detail before any inductive generalisations can be drawn from such data.

Village sign languages may not only lack structures found in other sign languages, they may also include structures that have never been documented in other sign languages before. Data that provide evidence for unique structures that are new to sign language linguistics are particularly valuable for comparative research such as conducted in Sign Language Typology studies. Such structures extend the known range of variation across sign languages and may also provide new insights into typological patterns. An interesting example of such data comes from the domain of number signs in different village sign languages. Zeshan et al (in prep.) describe the systems of cardinal numerals in three village sign languages from India (Alipur Sign Language, APSL), Turkey (Mardin Sign Language, MarSL), and Mexico (Chican Sign Language). All three sign languages have numeral systems with unusual features that have not been documented in any other sign languages yet. Zeshan et al (in prep.) describe the occurrence of vigesimal numerals, subtractive numerals, unusual numeral bases, and spatial morphology in numerals. Table 2 presents a summary of these structures across the three sign languages.

Table 3. Typologically unusual numerals in village sign languages

| | ALIPUR SIGN LANGUAGE | CHICAN SIGN LANGUAGE | MARDIN SIGN LANGUAGE |
|----------------------|-------------------------|-------------------------|-------------------------|
| Base-20 numerals | _ | + | + |
| Base-50 numerals | + | + | + |
| Subtractive numerals | + | _ | + |
| Spatial modification | + | - | _ |

As is evident from Table 2, each sign language users a different array of structures. Vigesimal numerals, which typically involve multiplication with 20, are not uncommon across spoken languages (cf. Comrie 2005), but had not been documented in sign languages before. In MarSL, there is a vigesimal subsystem whereby 40 is expressed as 2×20 , 60 as 3×20 and 80 as 4×20 (see Figure 1).



Figure 1. The numbers 40 and 80 in MarSL

The number 20 is also used, along with the number 50, as a base from which to construct larger numerals. In Chican Sign Language, these numbers are added successively, so that, for instance, 80 is expressed as 50+20+10. Thus 50 and 20 are both used as additive bases in Chican Sign Language (see Figure 2). It is striking that independently of each other, all three sign languages have developed a system that uses 50 as a base number.



Figure 2. 20+10 in Chican Sign Language to express the number 30

Figure 3 shows the use of spatial modification in a numeral subsystem in APSL. This is used to express the numbers 100, 1,000 and 100,000, that is, increasing the spatial dimensions of the sign is equivalent to adding additional zeros in written numbers.² Obviously, spatial modification is not available in the morphology of spoken languages, and to our knowledge, an equivalent construction is also undocumented in other sign languages.







Figure 3. The numbers 100, 1,000 and 100,000 in APSL

Both MarSL and APSL also use subtractive numerals, though in quite different ways (see Zeshan et al., in prep, for details). In MarSL, a number such as 18 may be expressed as 20-2 (see Figure 4). The subsystem in MarSL has a more restricted scope of use (up to a maximum of -5), but subtractive numbers in APSL are much more productive, with numbers such as 30-2 for 28, 200-5 for 195, or 50-2 for 48 found with some frequency in the data. Subtractive numerals are known to occur in some spoken languages, but were previously undocumented in sign languages.





Figure 4. TWENTY TWO-LESS in MarSL to express the number '18'

These data on numerals extend considerably our understanding of the range of typological variation that can be found across sign languages in this domain. It is abundantly clear that village sign languages are a rich source of new information on the possible linguistic expressions that can be found in sign languages. They challenge previously held assumptions on the structures we previously expected to find in all sign languages, as well as presenting evidence of structures that are new to sign language linguistics. As some of the latter structures are attested or even common in spoken languages, such data may also lead us to reconsider the relationship between signed and spoken languages. That is, with respect to a particular domain of phenomenon, a certain sign language may turn out to be more similar to a spoken

language than other sign languages. Therefore, it is desirable to evolve a new approach to typology that is explicitly and systematically cross-modal.

2.3. Village sign languages and urban sign languages

It may be tempting to think of sign languages in terms of two distinct subtypes - village/rural sign languages and urban sign languages. Many rural sign languages tend to have several aspects of their sociolinguistic setup in common. For instance, deaf education and other specific infrastructure such as sign language interpreting or deaf associations tend to be absent, a large number or even the majority of sign language users are hearing people, the incidence of deafness has genetic reasons, and there is typically no official status or recognition for rural sign languages. Lanesman and Meir's contribution in this volume sets out these parameters very clearly, including the important role that hearing signers have played in the maintenance of Algerian Jewish Sign Language so far, and there are pertinent similarities with a number of other village sign languages. However, as argued in Section 1 and demonstrated in more detail in the sociolinguistic sketches in Part II of this volume, there are also many differences between the various rural signing communities. It is far from correct to say that all village sign languages occur in very similar sociolinguistic or socio-cultural settings.

In a similar way, there is limited evidence that certain kinds of linguistic structures tend to occur in several unrelated rural sign languages. For example, it has been reported that the conventional signing space is very large in several village sign languages. Signing with fully outstretched arms, bending down for signing in a lower space, and a wider range of places of articulation on the body such as on the lower extremities have been documented (cf. Marsaja, 2008 and de Vos, 2012, for Kata Kolok; Nyst, 2007 for Adamorobe Sign Language). However, as illustrated in the previous section, there are also many grammatical differences between village sign languages, as would be expected given that they have no geographical or genetic affiliation with each other

Similarly, the organisation of the lexicon is obviously particular to each individual sign language, regardless of possible parallels between village sign languages in individual instances. For instance, it has been observed that rural sign languages sometimes seem to have a relatively smaller number of items in semantic fields, such as pointed out in Adone, Bauer, Cumberbatch and Lawurrpa with respect to colour terms in this volume. Some village sign languages have very few colour terms and use alternative ways of referring to colour, in particular pointing in the environment. Typically, such pointing is not ad hoc, but conventionalised in some way: In Al-Sayyid Bedouin Sign Language, colourful clothing is used to point out individual colours, and in Kata Kolok, pointing for colour is accompanied by a conventionalised nonmanual behaviour or the lexical sign for PAINT (de Vos, 2011). Again, one could speculate whether the absence of formal schooling has an impact on lexicon areas such as colours or large numbers (some village sign languages, such as Alipur Sign Language, lack signs for specific very large numbers), but on the basis of data available so far, this does not warrant a categorisation of "village sign languages" as a linguistic sub-type. In fact, it is necessary to look much more closely at the characteristics of individual instances of rural sign languages.

The contribution by Nyst in this volume provides a particularly telling example in detailing the use of rural signing varieties in various communities in Mali. Nyst argues that more careful distinctions need to be made between what has been known previously as "home sign", that is, the improvised gestural communication used by isolated deaf people to communicate with their hearing environment, and the "full-fledged sign languages" of large, typically urban communities of deaf signers. Many scenarios of sign language use in rural areas do not fit neatly into these two categories, but fall somewhere in between, and this in-between area has not been adequately conceptualised in sign language linguistics.³

One suggestive generalisation that merits more detailed consideration is the fact that many village sign languages exist in a language contact situation that is different from urban deaf communities. While all sign languages are subject to language contact with the surrounding spoken languages, the rural communities represented in this volume are different in that deaf signers live in close daily contact with a large number of hearing signers, who represent the majority of sign language users. That is, the majority of signers use the sign language as a second language (L2), and it is legitimate to ask whether this has effects on the linguistic organisation of the sign language. For example, the comparatively limited use of verb inflection in ABSL (Sandler et al. 2005), Adamorobe Sign Language (Nyst 2007), Kata Kolok (Marsaja 2008; de Vos 2012), and IUR (Schuit et al. 2010), may have something to do the intensive bimodal language contact situation, the learnabilty of morphologically complex structures in spatial grammar by adult learners, or both. Again, this is first and foremost an empirical question, and we must be careful not to draw premature conclusions.

The existing data so far suggest that the impact of spoken language structures on village sign languages is variable. Nyst (2007) documents several

important structural effects of the presence of spoken Twi in the environment of Adamorobe Sign Language. This includes the role of mouthing (mouth movements derived from the articulation of spoken language words) in distinguishing colour terms, in a similar way as in Konchri Sain (see Adone, Bauer, Cumberbatch & Lawurrpa, this volume). AdaSL also has serial verb constructions that parallel the serial verb constructions in Twi. On the other hand, Kata Kolok shows virtually no grammatical influence from spoken Balinese (Marsaja 2008). They are virtually no mouthings in KK, and parallels in grammatical constructions are negligible. Similarly, Zeshan et al. (in prep.) detail a mismatch between number systems in the signed and spoken languages of Mardin (Turkey), Alipur (India) and Chican (Mexico). In all three sign languages, the way numbers are constructed is very different from the surrounding spoken languages. For instance, none of the spoken languages used in Mardin at the time when the sign language community first flourished – Turkish, Kurdish, and Arabic - has any occurrence of vigesimal or subtractive numbers. On the basis of available evidence so far, it must be concluded that the impact of the large number of hearing signers on the linguistic structures of rural sign languages varies according to factors that are not yet sufficiently clear.

What is very clear in all village sign languages where this has been investigated is the influence of local gestures used by hearing people on the sign language. For instance, functional gestures used for questions, non-manual gestures such as negative head movements (e.g. headshake), and "word-like" gestures such as "thumbs-up", "money", etc., are easily carried over into sign languages. The chapter by Le Guen in this volume presents a detailed example of signs used to express time in Yucatec Mayan Sign Language, 4 and how these signs are derived from the conversational gestures used by hearing people in the same area. Both conventional gestures and signs in the local sign language reflect the conceptualisations of time that are characteristic of this cultural context, where time is viewed as cyclical rather than a linear succession of events. The influence of gestures on signs is not surprising, and in fact, is amply documented in urban sign languages (e.g. Zeshan 2000 for Indo-Pakistani Sign Language). Therefore, the relationship between gestures and signs is not something that distinguishes rural and urban sign languages from each other, but something that is characteristic of both.

Another potential issue that has sometimes been suggested to account for structural characteristics of rural sign languages is their assumed developmental path. Nonaka (2004) mentions that sign languages in small-scale rural communities often tend to arise suddenly, flourish briefly, and disappear relatively quickly, often before there has been a chance to properly document them. There is clearly a developmental difference between an ad hoc home sign system used by the first deaf person born into a community and a conventionalised sign language used by a substantial number of people over several generations. Sandler et al. (2005) imply that the absence of a developed system of spatial verb agreement (directionality) in Al-Sayyid Bedouin Sign Language (ABSL) could be due to the fact that this sign language has arisen quite recently. As the contribution by Kisch in this volume details, the first deaf persons in the Al-Sayyid community were born from the 1920s onwards, and it took until the 1950s for a larger cohort of deaf signers to arise, who would have had sign language input from older signers other than home sign. A possible argument is therefore that the historical development of ABSL has not yet progressed far enough to produce a full-fledged system of verb directionality.

However, evidence from other village sign languages is not in line with an argument around a historical developmental path. The case of Kata Kolok is pertinent here as this sign language also lacks a developed system of directionality. However, KK is considerably older than ABSL. De Vos (this volume) argues that a substantial cohort of deaf signers was probably already present in the community five generations ago.⁵ Yet KK also lacks verb directionality, and there is no indication that generations of younger signers are moving towards such a system. In other words, KK has historically stable and fully developed sign language without spatial verb agreement. Similarly, Nyst (2007) concludes that AdaSL seems to have moved on its own particular developmental path, and characteristics that are common in urban sign languages, such as entity classifiers, have simply not been part of the development of AdaSL.

In conclusion, it is premature at the current stage of our knowledge on rural sign languages to make unwarranted generalisations about their linguistic structures, their historical development, and the relationship between linguistic structures and sociolinguistic characteristics. In order to make valid empirical generalisations, we first need to assemble data from a much larger number of rural sign languages. Data from each sign language should be evaluated carefully and on their own terms in each case. This approach has been integral to the field of Sign Language Typology from the beginning, and has resulted in surprising discoveries, for instance with respect to typological variation across sign languages in the domains of negation, questions, and possession (Zeshan 2006, Zeshan and Perniss 2008). There is no doubt that data on village sign languages will extend further of appreciation of typological diversity and patterning in sign languages.

3. Conclusion

Perhaps the most important contribution that this volume will make to the field of sign language studies is the sheer variety of topics that can fruitfully be addressed in relation to village sign languages. We can look at these sign languages from the point of view of language endangerment, as in the chapter by Lanesman and Meir. The great majority of village sign languages are moderately or critically endangered, and there is a clear urgency in documenting both their unique sociocultural settings and their linguistic structures. The literature on language endangerment so far comprises virtually no studies of endangered sign languages, so material such as is assembled in this volume makes an innovative contribution to the field of language endangerment. Another important angle is the considerable variety of settings that we find across rural languages. The contribution by Nyst rightly points out that our conceptual understanding and terminology in sign language linguistics are currently insufficient to properly appraise and reflect on these various situations. Moreover, the various sociolinguistic settings in which these signing varieties arise call for flexible and alternative language documentation methods (contributions by Dikyuva, Escobedo Delgado, Panda and Zeshan; Nyst, this volume; de Vos 2012).

A particular hallmark of the present volume is the fact that both linguists and anthropologists have contributed to its content. The detailed reflections by Kisch on how the ABSL community of signers as arisen and constructed itself will allow sign language linguists to think about these communities in a much more differentiated way. Conversely, the contribution by de Vos is one of very few studies of first language acquisition in a rural sign language, and such material is helpful to consider for anthropologists with an interest in the transmission of language and culture. Researchers from allied specialisms such as gesture research, linguistic anthropology, and multimodal communication may also find the multi-layered relationships between gestures and signs valuable. The chapter by Le Guen presents a fine-grained analysis of the expression of time, and the YMSL system is clearly very different from what we find in most urban sign languages.

Finally, several contributors in this volume also reflect on the role of researchers in these rural communities. This is seen in the chapter by Kusters, which documents and reflects on her work in the AdaSL community. The contribution by Dikyuva, Escobedo Delgado, Panda and Zeshan compares work in three different fieldwork settings in Turkey, India and Mexico, based on the first-hand experiences of the three deaf fieldwork researchers who are co-authors of the contribution. Laid out in the form of professional

dialogues and interviews, this material is a step towards detailed case studies on research practices and ethics in rural communities of sign language users. Such issues have always been at the forefront of attention for the research teams that have been involved in these first large-scale comparisons of village sign languages, with all their intriguing sociocultural and typological differences.

Notes

- Additional structures are used in the numeral systems of each of these sign languages that are commonly found elsewhere, such as numeral incorporation. These are omitted here as the focus is on the unique structures of village sign languages, but the full range of structures is reported in Zeshan et al (in prep.).
- 2. There is no particular sign for 'million', as the system is modelled on the surrounding spoken language Urdu, which has a separate word for '100,000' but not for 'million'.
- 3. Zeshan (2011) uses the term "communal home sign" to refer to in-between situations along a continuum from "home sign" to "sign language", but it is clear that a larger number of distinctions need to be made.
- 4. The sign language used in Chican, where Le Guen's data are from, is called Chican Sign Language in the sociolinguistic sketch by Escobedo Delgado in this volume, but is called Yucates Mayan Sign Language by Le Guen.
- 5. Like Kisch in this volume, de Vos is aware that the definition and delineation of "generations" is difficult in both village communities. However, different delineations would still lead to the same conclusion that the incidence of deafness is substantially older for the KK community, and is probably in line with many present-day urban sign language communities, particularly in those regions in developing countries where urbanisation is more recent than in industrialised countries.

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