

“Switching caps”

Two ways of communicating in sign in the Port Moresby deaf community, Papua New Guinea

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- Most bilingualism and translanguaging studies focus on spoken language; less is known about how people use two or more ways of signing. Here, I take steps towards redressing this imbalance, presenting a case study of signed language in Port Moresby, Papua New Guinea. The study’s methodology is participant observation and analysis of conversational recordings between deaf signers. The Port Moresby deaf community uses two ways of signing: *SIGN LANGUAGE* and *CULTURE*. *SIGN LANGUAGE* is around 30 years old, and its lexicon is drawn largely from Australasian Signed English. In contrast, *CULTURE* – which is as old as each individual user – is characterised by signs of local origin, abundant depiction, and considerable individual variation. Despite *SIGN LANGUAGE*’s young age, its users have innovated a metalinguistic sign (*SWITCH-CAPS*) to describe switching between ways of communicating. To conclude, I discuss how the Port Moresby situation challenges both the bilingualism and translanguaging approaches.

Keywords: sign language, bilingualism, translanguaging, Papua New Guinea, metalinguistics

1. Introduction

Much is known about how people use two or more ways of speaking. The ways of speaking may be named languages, such as English and Spanish (Poplack, 1980); dialects of one language, such as Aboriginal English and Standard Australian English (Oliver & Nguyen, 2017); or speech registers such as those in Lachixío Zapotec (Sicoli, 2010). Comparatively little is known, however, about how people use two or more ways of signing. My principal goal in this article is to add to the sparse data on how people use two ways of communicating *in sign*. To do so, I present a case

study of signed language use in the deaf community of Port Moresby, Papua New Guinea. The members of this community explicitly reify their use of two different ways of communicating in sign: *SIGN LANGUAGE* and *CULTURE*.¹ *SIGN LANGUAGE* is a young way of signing, likely no more than 30 years old. The way of signing denoted by the deaf community as *CULTURE* is largely only as old as each individual deaf user. I also investigate a metalinguistic sign that signers use to denote how they move between *SIGN LANGUAGE* and *CULTURE*: *SWITCH-CAPS*.

In this article, I find that the principal differences between *SIGN LANGUAGE* and *CULTURE* are (i) their acquisition pathways, (ii) social circumstances of use, and (iii) the origin of the signs in their lexicons. I find that the situation in Moresby is similar to that in other Asia-Pacific countries including Nepal, India and Cambodia. In these places, school-based ways of signing, often associated with urban areas, coexist alongside non-school-based ways of signing, often associated with rural areas. However, the situation in Moresby differs from other bilingual sign situations, such as in Ban Khor, Thailand and Adamorobe, Ghana, due to both *SIGN LANGUAGE* and *CULTURE*'s relatively shallow generational depths. Finally, I explore how well the Moresby situation and others like it can be understood using the theoretical paradigms of bilingualism and translanguaging, and where these theories may clash with community expectations.

Before moving on to review the literature, I clarify my choice of terminology in this article. Particularly when speaking about deaf communication in Moresby, I use the terms 'way of communicating' or 'way of signing' to avoid needing to use terms such as 'language', 'dialect', 'system' and so on, which have taken on evaluative and loaded senses in the literature.

2. Two ways of communicating

Before reviewing the literature on how people use two or more ways of signing, I first briefly survey two theoretical approaches to how people use two or more ways of communicating. The majority of studies in this area are in what I term the 'standard bilingualism paradigm'. Bilingualism has been defined as the regular or alternate use of two or more languages (Grosjean, 1982, p. 1; Romaine, 1995, pp. 11–12). Bilingualism scholars may debate the degree of competence an individual must have in two languages to be classified as bilingual, or whether a 'bilingual' must

1. In this paper, I follow the sign linguistics convention of presenting glosses for signs in upper case. If a gloss is separated by a hyphen, this denotes one sign (e.g., *SWITCH-CAPS* is one sign, not two; whereas *SIGN LANGUAGE* is two signs, not one). I further outline my specific glossing practices as the paper develops.

have equal competence in, say, producing *and* understanding a second language to be classified as such (see Edwards, 2006 for a summary of these debates). What all bilingualism scholars appear to implicitly agree upon, however, is that the two ways of communicating of interest to this paradigm are two ‘named languages’; two discrete bundles of lexical, structural, and sociocultural features. The standard bilingualism paradigm strains when faced with two ways of communicating which cannot be easily corralled into discrete blocs, whether on lexical, structural, or sociocultural grounds. A key focus of the standard bilingualism paradigm is code-switching behaviour (e.g., Myers-Scotton, 1993; Poplack, 1980). When two ways of communicating have been in close contact since their relative inception, it may be difficult to separate them neatly so as to proceed with studies on code-switching.

An alternative lens with which to look at how people use different ways of communicating is that of *translanguaging* (García & Wei, 2014; Otheguy, García, & Reid, 2015; Wei, 2011; also see Jaspers, 2018). In one approach to translanguaging, Otheguy et al. (2015) advocate an explicit focus on the *idiolect*, and set ‘named languages’ aside as socio-political constructs (also see Makoni & Pennycook, 2006). An idiolect is the entire linguistic repertoire of an individual. This linguistic repertoire comprises a set of lexical and structural features, which have been influenced by an individual’s life experiences, including workplaces, pastimes and peers (Wright, 2018). Many of these features do fall into named language boxes, but no two idiolects (even those of people who can be said to use the same named language) are identical (Otheguy et al., 2015, pp.288–291). The idiolectal focus of Otheguy et al.’s translanguaging approach is particularly useful when working with deaf people’s communication, as a focus on language use at the individual level allows for a full description and analysis of the multi-modal, fluid ways deaf people communicate, whether those ways fall into ‘named language’ boxes or not (Kusters, Spotti, Swanwick, & Tapio, 2017; Moriarty Harrelson, 2017; Safar, 2019). The risk, however, is that by emphasising the ‘creativity’ and ‘fluidity’ of individual ways of communicating, users of minority languages in particular may be giving up the opportunity to secure and maintain their ways of communicating as discrete, worthy, named languages (Cenoz & Gorter, 2017; De Meulder, Kusters, Moriarty, & Murray, 2019). I return to these two theoretical approaches and their related ethical implications in Section 10.

3. Studies of how signers use different ways of communicating

The bulk of scholarship on how people use different ways of communicating is on how people do so using speech. The majority of this research uses the standard bilingualism paradigm. Researchers’ focus may be on structural aspects of how

people use different languages in their linguistic repertoires, such as the ‘switch point’ within utterances (e.g., Muysken, 2000; Poplack, 1980). Alternatively, researchers may investigate the social aspects of bilinguals’ language use, such as which social identities people index when choosing to use one language or another (e.g., Gumperz, 1977; Myers-Scotton, 1993). There is some work on deaf people’s bilingualism in languages in different modes, such as bilingualism in written English and signed American Sign Language (ASL) (for an overview of this work, see Quinto-Pozos & Adam, 2013, pp.380–388). There is comparatively little understanding, however, of how people may have command of two ways of signing.

In terms of existing work, Quinto-Pozos (2008) investigates structural effects on language use of bilingual users of ASL and Mexican Sign Language (LSM), such as use of LSM handshapes in ASL signs. Adam (2012) looks at code-switching among users of Auslan (Australian Sign Language) and the variety of Irish Sign Language used in some Australian deaf schools. Yoel (2007) focuses on the attrition of Russian Sign Language among immigrants to Israel who had then acquired Israeli Sign Language. Zeshan and Panda (2015) look at code-switching among users of Burundi Sign Language (BuSL) and Indian Sign Language (ISL), where the BuSL signers had acquired ISL in the context of a university course in India. Challenges Zeshan and Panda face include a lack of documentation of BuSL with which to compare its use in a code-switching context, as well as the high degree of shared signs between BuSL and ISL, despite these languages having no historical relationship or prior contact history. The authors ascribe this to the iconic nature of signs in general, which potentially results in a higher baseline level of shared vocabulary, even when the sign languages in question are unrelated. They note that this makes the identification of code-switching points difficult when working with unimodal sign bilinguals.

Over the last decade, sign language research has expanded its focus beyond the languages of large deaf communities such as ASL and Auslan, to sign languages used in rural areas (e.g., Zeshan & de Vos, 2012; Le Guen, Coppola, & Safar, 2020; Safar, 2019). Many users of sign languages in rural areas are bilingual in another sign language, often one that is taught in schools. Contact between rural and school-based sign languages often results in endangerment of the rural sign language, as in the cases of Ban Khor Sign Language and Thai Sign Language (Nonaka, 2014), Algerian Jewish Sign Language and Israeli Sign Language (Lanesman & Meir, 2012), and Al-Sayyid Bedouin Sign Language and Israeli Sign Language (Kisch, 2012). In other cases, such as Ghanaian Sign Language (GSL) and Adamorobe Sign Language (AdaSL), the school-based sign language co-exists with the rural sign language. Kusters (2014, 2019) investigates the social dimensions of bilingualism in and contact between GSL and AdaSL, reporting different language ideologies tied to each code. In all of these studies, the sign languages in question had several generations of users before coming into contact

with the other sign language and producing bilingual signers. In Section 10, I will show that the Moresby case is somewhat different, given the shallow generational depths of SIGN LANGUAGE and CULTURE.

Finally, other studies deal with situations where signers use two ways of signing, but where one way is much less conventionalised than the other. This lack of conventionalisation in the second way of signing contrasts with the aforementioned studies in Thailand, Israel and Ghana, where the rural way of signing has a degree of conventionalisation comparable to that of the school-based way, by virtue of the rural way of signing’s multigenerational use. Here, I review the literature on three such situations, as I will show in Section 10 that these have much in common with Moresby.

In Nepal, Green (2014) investigates how users of Nepali Sign Language (Nepali SL) also use “NATURAL.SIGN” in particular communicative situations (see Green, 2014, p.24). Green (2014, p.23) defines Nepali SL as “the sign language used by deaf Nepalis who have grown up in deaf schools, socialize with other deaf people, participate in deaf-run organizations, etc.” Hoffmann-Dilloway (2016, p.53), also working in Nepal, draws on deaf Nepalis’ understanding that a way of signing is Nepali SL if “it drew on the corpus of lexical items collected in the Nepali SL dictionaries produced by associations of Deaf persons”. Turning to the second way of signing in Nepal, Green (2014, p.24) defines NATURAL.SIGN as a “range of communicative practices” that occur in specific social circumstances, such as when deaf Nepalis who use Nepali SL need to communicate with hearing people, or with other deaf Nepalis who do not know Nepali SL. Green (2014, p.25) also negatively defines NATURAL.SIGN, as signed communication that is *not* Nepali SL (or a foreign sign language).

In approaching NATURAL.SIGN in Nepal, Hoffmann-Dilloway (2011, 2016, pp.66, 114) and Graif (2018, pp. 16, 21; also see fn 3 on p. 112) largely equate this way of communicating with the sign typological category of ‘homesign’. Homesign is most generally understood as the ad-hoc communicative systems developed by linguistically isolated deaf children (Goldin-Meadow, 2003), although Nyst, Sylla, and Magassouba (2012) and Reed (2019a) question how well this canonical understanding fits the diverse ways deaf adults in rural areas communicate. Hoffmann-Dilloway and Graif take a largely etic or outsider perspective on ‘natural sign’, quickly aligning it with other purportedly similar ways of communicating used by deaf people worldwide. In contrast, Green approaches NATURAL.SIGN not by assigning it to a certain linguistic ‘type’, but rather by drawing explicitly on deaf signers’ own impressions of NATURAL.SIGN. Green focuses on the emic or insider understandings of deaf Nepalis as to what NATURAL.SIGN constitutes. In doing so, she gradually reveals a range of language ideologies tied to NATURAL.SIGN, from an

understanding that it is “communication [that] works” to a way of communicating that is “a smaller thing” than Nepali SL (Green, 2014, pp. 25, 29).

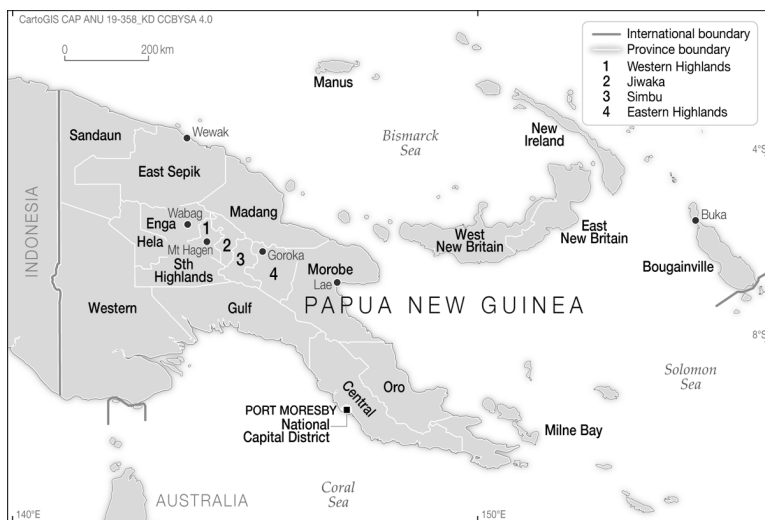
Similarly, Kusters and Sahasrabudhe (2018) discuss the emic perspectives of deaf Indian Sign Language (ISL) signers on ways of signing in India. As in Nepal, their participants clearly identify two different ways that deaf people use to communicate in India, each with different social circumstances of use. Namely, ISL and “signing” more generally is used between deaf people, while a way of communicating that participants variously labelled as “gesture” and “very simple signs” is used between deaf and hearing people (Kusters & Sahasrabudhe, 2018). The overarching language ideology of Kusters and Sahasrabudhe’s participants is that both ways of communicating are valuable in their discrete domains of use. Also in India, Jepson (1991) identifies two ways of signing and assigns them etic terms. She names the first way “Urban Indian Sign Language”, describing it as a “unified and relatively standardized language used by members of the educated, middle-class deaf community” (Jepson, 1991, p. 37). Jepson then reports a way of communicating by “rural deaf”, who “employ what the urban deaf call rustic sign”; Jepson (1991, p. 37) herself terms this “Rural Indian Sign Language”.

The situation in Cambodia parallels that of Nepal and India, in that deaf Cambodians also identify two different ways of signing. They further associate one way of communicating with deaf sociality and schooling, and the other with hearing people and deaf people who do not know the school-based way of signing. In Cambodia, various NGOs teach ways of signing known as “Cambodian Sign Language”, “Khmer Sign Language”, “DDP sign” and “Krousar Thmey sign” (Moriarty Harrelson, 2017). Deaf Cambodians who do *not* attend these schools use a range of multimodal strategies to communicate; Moriarty Harrelson describes their use of sign, gesture, drawing, and the use of everyday objects to communicate, such as city maps. Unlike in Nepal and India, however, Moriarty Harrelson (2017, pp. 2–3, 13, 15) reports that deaf people learning one of the Cambodian school-based sign languages seem to have internalised NGO narratives that rural deaf people “have no language”, that they are “stupid”, or that their way of signing is comical. The Cambodian deaf people in this study who have been exposed to school-based ways of signing do not appear to value other ways of communicating in sign to the same degree that deaf people in Nepal and India do.

4. The Port Moresby deaf community

Papua New Guinea (PNG) is an island nation directly north of Australia. The island of New Guinea is split between PNG in the east, and Indonesia in the

west. The country is divided into 22 provinces (see Map 1). The population of PNG is around 7.5 million, and the population of the capital, Port Moresby, around 365,000 (National Statistical Office, 2014). Rural migration to Moresby is common, particularly from the densely-populated Highlands region (Enga; Hela; Jiwaka; Simbu; and Southern, Western and Eastern Highlands provinces). Around two million of the population of PNG live below the poverty line (Pacific Islands Forum Secretariat, 2015, p.18). While exact statistics on deafness are unreported, in the wider Asia-Pacific region, 5.5% of people have “severe”, “profound” or “complete” hearing impairment (Stevens et al., 2013, p.149).



Map 1. Provinces of Papua New Guinea

The history of signed education in PNG is detailed in Reed and Rumsey (2020). Briefly, in 1990, the Christian Brothers (a worldwide Catholic religious organisation) imported Australasian Signed English (ASE) materials for use in a deaf school they established in the town of Wewak (e.g., Conaghan, n.d.). This school was run by a local PNG NGO, Callan Services. ASE is a sign system intended to reflect spoken English word-for-word (Johnston & Schembri, 2007, pp.32–33). It was created by a series of committees in Australia, and incorporated lexical signs from Auslan, the natural sign language of the Australian deaf community (MacDougall, 1988). In 1994, a ‘Melanesian Sign Language’ dictionary was published in PNG (Department of Education, 2000 [1994]). This featured mainly ASE signs, plus some new signs for local foodstuffs and clothing. As I show in Sections 6 and 7, introduced ASE provided the bulk of the lexicon of SIGN LANGUAGE, and the advent of dedicated deaf schooling provided a critical meeting

place for deaf children. As such, SIGN LANGUAGE in PNG can be tentatively dated from 1990, making it no more than 30 years old.

In PNG between 1990 and 1994, a small proportion of PNG's deaf children were educated at schools for the deaf. In 1994, the PNG government ordained a move to 'inclusive education', which saw dedicated deaf schools progressively closed. From then until now, deaf children may be educated for a few years at 'special education centres' alongside other children with different disabilities. Most of these are run by Callan Services. Deaf children are then sent to mainstream schools, where interpreters are not provided. Teachers in mainstream schools with a deaf child in their class are meant to receive sign language instruction, but due to under-resourcing, this usually does not happen. Some PNG schools have 'deaf units', where hearing teachers instruct deaf children using sign. Many deaf children, particularly those in rural areas, attend mainstream schools; most of these children drop out of schooling fairly quickly. The Red Cross School in Moresby is an exception in that it teaches deaf children up until the eighth grade. Teachers at Red Cross have some signing skills, and Red Cross also employs a handful of deaf teacher aides. The co-located Buk Bilong Pikinini library at Red Cross also employs deaf librarians.

The Moresby deaf community comprises around 50 deaf people living and working in Moresby, ranging in age from approximately 7 to 45 years old. I arrive at this estimate because during my fieldwork, I did linguistic work with 40 members of this community, and I met and heard about several more deaf community members with whom I did not work. There are almost certainly many more deaf people than this living within Moresby, but they are either unaware of or uninterested in joining the deaf community (see Section 6). Many people in the deaf community have a connection to Red Cross School, whether as students or employees. All of the deaf people I met who were married had deaf spouses. Several of these couples have children, all of whom are hearing.

I term the Moresby community a 'deaf community' rather than a "sign language community" (De Meulder, Krausneker, Turner, & Conama, 2019). This is partly in response to the fact that "deaf community" is how my consultants described their community to me, both in sign and in written English. In addition, while many sign language communities in the world include both hearing and deaf members, the Moresby community comprises deaf people almost entirely. While all the children of deaf adults in the community are hearing, these children are young and do not make up a large proportion of the overall community. I met only one hearing person who could communicate in sign with a level of fluency approaching that of the deaf people I met (namely, an interpreter employed by Buk Bilong Pikinini).

5. Methodology

Before detailing my methodology, I briefly outline my positionality. I am a white, hearing woman from Melbourne, Australia. My only two siblings are deaf. As a 3-year-old in the early 1980s, I learned Australian Signed English (ASE) from my hearing mother, who taught it to herself largely from ASE dictionaries (such as Jeanes & Reynolds, 1982). My interaction with my deaf siblings was exclusively in ASE. My mother later went on to learn Auslan at a tertiary level, and my sister and brother began to progressively interact more with the deaf community. As a result of both of these factors, Auslan percolated into our home over time. I describe my familylect as Auslan with a moderate degree of signs with an ASE origin. I also speak fairly good Tok Pisin, a mainly English-lexified creole and one of PNG’s national languages. I acquired this over the course of ten weeks of fieldwork in PNG in 2018.

My research into signing in PNG began in 2017. As a Master’s student, I began working with recordings made by Professor Alan Rumsey of communication between deaf and hearing people in the PNG Highlands. I was interested in what else was known about sign language in PNG beyond Kendon’s (1980a, 1980b, 1980c) study and a brief note by Johnston and Schembri (2007, p.33). Many Skype calls and emails to those working with deaf people in the Pacific led me to Noah Agino, a deaf man living in Moresby. At the time, Noah was studying in Fiji, and he encouraged me to visit his deaf wife, Lucia Rifu Agino, at the Red Cross School in Moresby.

I travelled to PNG for the first time in late 2017 for a separate fieldwork project on a spoken language of Western Province. En route to my fieldsite, I visited Lucia at Red Cross and also met another deaf community member, Josh Yembo. I signed Auslan to both of them and found I could understand them very easily. I noticed that Lucia used some ASE signs that I recalled from my childhood, but which I had not seen used in Auslan.² Lucia and Josh told me that they signed “PNGSL”. They showed me how the sign PNGSL was an assimilated compound of the signs PAPUA-NEW-GUINEA, SIGN and LANGUAGE. I showed Lucia one of Rumsey’s recordings of sign in the Highlands. Lucia responded to me, “That’s CULTURE”. I gloss this sign as CULTURE as it is identical to CULTURE in both ASE and Auslan, and Lucia also mouthed English “culture” as she signed it to me. However, I later learned that the translation of CULTURE is not *culture* in the English sense, but is closer to Tok Pisin *kastom* or *kastam*, which refers to traditional and/

2. An example that I noted in my fieldnotes was that Lucia used ASE HOTEL as shown here: http://sign.com.au/index.php?email_address=&title=&word=hotel%0D%0A; Auslan HOTEL can be seen here: <http://www.auslan.org.au/dictionary/words/hotel-1.html>

or rural ways of behaving (Otto, 1992). Indeed, in a later conversation with me, a deaf man who speaks good Tok Pisin, Apo Yosman, accompanied CULTURE with the spoken word “kastom”.

I returned to PNG in March 2018, when I conducted linguistic fieldwork with 12 deaf people living in rural areas of the Highlands for my Master’s research (Reed, 2019a). En route to Australia, I returned to Moresby where Noah and Lucia had arranged a deaf community meeting for me to discuss my future research plans and for me to hear about the community’s development goals. At this meeting, the deaf community expressed their frustration at the poor quality of sign interpreting available in PNG. At the time, a ‘PNGSL dictionary’ and ‘grammar book’ were in production by Callan Services. Some of the community expressed to me frustration that hearing people were dominating this dictionary project, rather than it being deaf-led. In October 2018, I returned to Moresby for four weeks of dedicated fieldwork, upon which this article is based.³

For my fieldwork, I was focused on documenting language variation in Moresby, as during my brief meetings with the community I had already noticed the different ways people signed. My main field methodology was recording of conversation between signing dyads or triads, with me out of the room. I did not encourage signers to discuss any particular topic or to use any particular way of signing. I then reviewed the material with the signers, translating the conversation sign by sign. This translation process was recorded. I made these recordings mainly in the library at Red Cross School when class was not in session, and I spent time after recordings socialising with the community in the schoolyard. I also filmed various discussions and presentations at a one-week interpreter workshop in Moresby held by Callan Services, which was attended by several deaf people from both the Moresby community and other PNG provinces. I made brief fieldnote jottings over the course of my day while I was not engaged in explicit linguistic work. Unless explicitly noted otherwise, examples in this paper were video-recorded. The recordings are progressively being archived in digital archive PARADISEC.

I did not work with hearing interpreters during my fieldwork, given the deaf community’s expressed dissatisfaction with interpreters and their general frustration that hearing people dominate deaf issues too much in PNG. Instead, deaf community members acted as informal interpreters and brokers for me, interpreting Auslan into SIGN LANGUAGE and CULTURE. I signed Auslan, which was intelligible given the fact that Auslan lexical signs formed the bulk of ASE, upon which

3. The project received ethical clearance from the Australian National University Human Research Ethics Committee (protocol number 2018/084). It was supported by a Language Documentation Grant from the Australian Research Council Centre of Excellence for the Dynamics of Language.

SIGN LANGUAGE is heavily based (as I will show). Over the course of my fieldwork, I learned and used SIGN LANGUAGE signs of local origin, such as TAXI, CAN’T-BE-BOTHERED, RESPECT and GET-CONFUSED. When working with signers who did not know SIGN LANGUAGE, I used the way of signing I had learned and used with rural signers during my March 2018 fieldwork, such as a negative gesture, a questioning gesture, BIRD, and WHITE-PERSON. Some deaf people with residual hearing or who had been late-deafened sometimes asked me to speak Tok Pisin to them, which I did.

6. SIGN LANGUAGE and CULTURE: Emic perspectives, acquisition pathways and social circumstances of use

In this section, I establish that there are two ways of signing in Moresby: SIGN LANGUAGE and CULTURE. In previous publications and presentations, I have described SIGN LANGUAGE as “PNGSL” and CULTURE as “culture sign” (Reed, 2019b, 2019c; Reed & Rumsey, 2020). In this article, I go back a step and unpack these terms. Regarding my glossing practices, many of the quotes in this article are metalinguistic discussions – that is, language being used to talk about language – so it is important to know what the actual form of the signs were, rather than their meaning alone. As such, I have attempted to strike a balance between a free translation and a glossed text, by rendering salient signs in upper-case glosses, while embedding them in a free translation for readability. In the remainder of the article, I identify signs with an identical counterpart in ASE in bold text. I leave other signs without an ASE counterpart in plain text; I infer that these signs are indigenous to PNG. Some signs are difficult to assign to either SIGN LANGUAGE or CULTURE. Many of these are pointing signs. Others, such as MALE, appeared identical in both SIGN LANGUAGE and CULTURE utterances (namely, for MALE, a fist hand tapped at or grasping the chin). Where this is the case, I render these signs in italics. I do not attempt to delineate between possibly conventionalised and possibly ad-hoc signs, as Graif does (2018, p. 80).

As I will show in Sections 6 and 7, the principal differences between CULTURE and SIGN LANGUAGE are (i) their acquisition pathways, (ii) social circumstances of use, and (iii) the origin of the signs in their lexicons. Deaf people in Moresby acquire SIGN LANGUAGE via association with deaf people who use SIGN LANGUAGE, whether those deaf people are school instructors, school peers, or other peers. They then use SIGN LANGUAGE with other deaf people who know SIGN LANGUAGE, and with the handful of hearing people who also know at least some SIGN LANGUAGE (such as teachers and interpreters). Much of the SIGN LANGUAGE lexicon is drawn from ASE. In terms of CULTURE, deaf people report using this as children with their hearing families and communities. It is unclear if CULTURE can be best described as ‘learned’

or ‘acquired’ from hearing families and communities, or rather co-developed with them. **CULTURE** is the way deaf people communicate with (i) their hearing families, both as children and adults, (ii) deaf people who do not know **SIGN LANGUAGE**, (iii) the hearing community at large (cf. **NATURAL.SIGN** [Green, 2014, p. 24]). Signs that Moresby signers explicitly denoted to me as **CULTURE** do not have origins in ASE. Many signs consistently recur across people’s varieties of **CULTURE**, such as **FEMALE**, **BIRD**, **WHITE-PERSON**, **SCHOOL** and **AEROPLANE**. Other signs appear to be unique to an idiolect.

CULTURE is also named by deaf people as **DEAF CULTURE**, **DEAF CULTURE SIGN**, **CULTURE SIGN**, and **FEMALE MALE**. I gloss the latter signs ‘female’ and ‘male’ because they can respectively refer to ‘woman’, ‘mother’, or ‘girl’, and ‘man’, ‘father’, or ‘boy’. **FEMALE** indexes the breasts and is not a sign of ASE origin, while **MALE** indexes a beard and is identical in both **SIGN LANGUAGE** and **CULTURE**. The use of **FEMALE MALE** to refer to this way of signing is possibly because these are two of the most frequent and widely known signs used in this way of communicating. **CULTURE**, **FEMALE MALE** and the other aforementioned terms are used by **SIGN LANGUAGE** users to refer to (i) a way of communicating and (ii) deaf people who use this way of communicating (see [7] and [20–22]). Deaf people who are exclusive **CULTURE** signers seemed to me aware that their way of signing was different from **SIGN LANGUAGE**, but they did not describe their way of signing to me as **CULTURE** or, indeed, with any other metalinguistic term. Hence, it is interesting that **CULTURE** is only named by a sign from an altogether different way of signing. **SIGN LANGUAGE** is also named by deaf people as **SIGN**, **PAPUA-NEW-GUINEA SIGN LANGUAGE**, **PNGSL**, and **ENGLISH SIGN LANGUAGE**. Note that **PNGSL** is not fingerspelled; rather, it is an assimilated compound of **PAPUA-NEW-GUINEA**, **SIGN** and **LANGUAGE**. **SIGN LANGUAGE** is reportedly used in other places in PNG, and during the interpreter workshop I attended, I met several deaf people from other provinces who were **SIGN LANGUAGE** users. It is as yet unclear, however, how **SIGN LANGUAGE** may vary on a regional basis.

I first address the acquisition pathways and social fora of use of **CULTURE**. John Numi, a deaf man from Moresby, expresses to me how he acquired **CULTURE**; namely from his (hearing) family and/or community. The following example demonstrates some of **CULTURE**’s social circumstances of its use; specifically, how John uses it to communicate with deaf people he encounters who do not know **SIGN LANGUAGE**.

- (1) **CULTURE** is one thing. **PNGSL** and **ENGLISH** are another. I **REMEMBER**, I **LEARN** them, and now I **UNDERSTAND**. As for **CULTURE**, I remember long ago, my father/men taught me. Signs like this: **MALE**, **FEMALE**, **BIRD**, **DEAD**. I learned them. I **REMEMBER CULTURE**. Now, I have learned and absorbed **PNGSL** and

ENGLISH. Now, when deaf people from rural areas come and sign like this, *MALE, FEMALE, AEROPLANE, FIGHT, DEAD* – I see and I **UNDERSTAND**.

Another signer, Michael Hiamboing, gives me an example of how his hearing mother would sign to him, and metalinguistically denotes this as **CULTURE**:

- (2) My **MOTHER** would **ASK** me... she would tap me on the shoulder and say, “*YOU GO SCHOOL!*” In **CULTURE**, **CULTURE**. Tap me on the shoulder and say, “*YOU GO SCHOOL!*”

In (3), I present the actual signed utterance of the first part of this quote. Note that Michael uses not only signs drawn from ASE (in bold) and signs that he explicitly denotes to me as **CULTURE**, but also uses other multimodal elements in his way of communicating with me. Namely, he uses speech, saying words to me in Tok Pisin, and also uses role shift, positioning himself as his mother and addressing me as himself as a young man.

(3)



Hands: *MY*

MOTHER

ASK

Voice:

mama

mi askim

Trans: ‘My mother would ask me...’



Hands: [tap shoulder]

YOU

Voice:

yu

Trans: ‘She would tap me on the shoulder and say, “You...”’



Hands: GO

Voice: ko

Trans: “Go to school!”

SCHOOL

skul



Hands: CULTURE

Voice: –

Trans: ‘In CULTURE.’

In addition to communication with hearing family, another social circumstance in which **CULTURE** is used is when communicating with the hearing community at large. Michael gives an example here, which he and another deaf man, Samson Toby, again metalinguistically identify as **CULTURE**.

- (4) **Michael:** I will be at **WORK**, screwing things together. A **HEARING** person comes up to me, taps me on the shoulder and says, “**TIME BREAKTIME EAT**”. “Oh!” I say. “Great!”...

Samson: **CULTURE**.

Michael: **CULTURE**.

In (3) and (4), it is not clear whether the forms of the signs, the characteristics of the signers, or the contexts of the utterances motivate Michael and Samson to describe them as **CULTURE**. It may be all of these things. What is certain is that I saw many of the forms in these quotes (such as **SCHOOL**, and the expression of ‘time’ via a point to the wrist) recur when people used **CULTURE** to communicate.

Turning to **SIGN LANGUAGE**, deaf people may acquire this at school, via combinations of (i) exposure to hearing teachers’ signing, (ii) explicit instruction by deaf instructors, and (iii) socialisation with deaf peers. I say ‘exposure’ to hearing teachers’ signing rather than ‘sign instruction’ by hearing teachers, as I cannot recall a report where a deaf person named a hearing person as their main conduit for successful **SIGN LANGUAGE** learning. Apo Yosman is in his late 30s and is one of the oldest people in the Moresby deaf community; he attended Red Cross as a child. His report of teachers’ signing is as follows:

(5) **Lauren:** When you were here, did teachers **SIGN**?

Apo: No.

Lauren: So they would **TALK**?

Apo: No, they would **SIGN**. A little. A few. Their **SIGN** was **NOT GOOD**.

In contrast, several deaf people I met in Moresby said that deaf teacher aides including Noah Agino and Josh Yembo had taught them **SIGN LANGUAGE**, either while they were schoolchildren or by association with these men as adults. During my fieldwork, Noah was a librarian at Red Cross, employed by Buk Bilong Pikinini. Noah attended a former residential deaf school in the Highlands and here recounts his schooling experience (in discussion with me and with his deaf wife, Lucia). His experience suggests some **SIGN** acquisition at school, but also how he learns Auslan from books and incorporates what he learns into his personal **SIGN** repertoire:

(6) **Noah:** Before, I didn’t understand. They used **P P**. Now, **AUSLAN** from this [points to his Auslan dictionary on table]. I read it. I think, what does that mean? For example, the sign **INTERNATIONAL**. It’s the **WORLD**. I absorb it, absorb it, and **UNDERSTAND**. But the deaf around here didn’t **SIGN** at **SCHOOL**. A few went to **SCHOOL**. They know **SIGN**. The teachers taught them but used **P P SIGN** [enacts signing while moving his mouth]. **P**.

Lauren: **P P SIGN**?

Lucia: **TALK P** [says with voice, *Tok Pisin*]

Noah: **USE P SIGN**.

I believe what Noah and Lucia mean by **P SIGN** or **P P** is the way I saw many hearing teachers of the deaf and hearing interpreters communicate with deaf people, using sign-supported Tok Pisin. That is, the teachers speak or silently mouth Tok Pisin, and use ASE signs alongside it. Signs are only placed sporadically alongside the spoken Tok Pisin stream, leading to ‘gaps’ in the signed part of the utterance. This is similar to how hearing teachers sign partial Nepali SL alongside spoken Nepali, as recounted by Hoffmann-Dilloway (2016, pp.49–51).

Deaf people also learn **SIGN LANGUAGE** via socialisation with and explicit instruction from deaf people who know **SIGN LANGUAGE**. Three deaf couples I worked with reported that one taught the other **SIGN LANGUAGE**. Deaf adults who are not employed often travel to Red Cross during the day and sit and chat with others. Three members of the deaf community live on site at Red Cross; one is also an employee of Red Cross, and two further deaf people are employed at Red Cross. In addition, I observed the young deaf schoolchildren at Red Cross to spend several hours signing amongst themselves and with older deaf adults after school had ended.

Glennish Manui is slowly teaching **SIGN LANGUAGE** to her deaf employee, Richard Korosan Pagan. Glennish has a market stall close to Red Cross where she sells *skon* (a type of bread roll; Tok Pisin, from English ‘scone’), among other things. Richard arrived from the Highlands in 2017 and had never learned any **SIGN LANGUAGE** before that time. In (7), Glennish explains how she communicates the notion of *skon* to Richard; (8) shows **SKON** and (9) shows **SKON**.

- (7) I ask Richard – a FEMALE MALE [signer] – to go to the shop and buy **SKON**. If I say it like this, **SKON**, to Joe [Glennish’s deaf husband], Joe understands. But Richard doesn’t know that **SIGN**. If I do it like this, **SKON**, he understands... Now I’ve taught [Richard] **SKON** and he understands to go and buy them.

(8)



SKON

(9)



SKON

SKON (8) is identical to ASE **CAKE**; I use Tok Pisin to gloss it to indicate how this sign’s meaning has shifted from its ASE origin. As Glennish points out, Richard is beginning to acquire **SIGN LANGUAGE** from other deaf adults in the community.

To conclude this section, it is relevant to briefly remark on how people like Richard become involved in the Moresby deaf community. Some deaf people told me about encountering other deaf people in the city, and inviting them to come and visit Red Cross. Some people accept the invitation, while others are reportedly uninterested. Some in the Moresby deaf community told me they heard about the community themselves, and made their own way to Red Cross. I jotted in my fieldnotes Glennish’s own experience of finding the community:

- (10) After Yr 9... I [Glennish] just stayed around and did gardening.
 I saw a deaf woman on street/around and said can I come with you?
 I came to Red Cross and was like OMG amazing.
 Started school @ age 25 at Red Cross. (Fieldnotes, 21 October 2018)

Upon finding the Moresby community, Glennish appears to have found a place where she can fully belong. This is similar to Graif’s observations in Nepal (2018, p.83), where Graif relates the experience of a rural “homeless and unemployed” deaf man arriving at the offices of the Kathmandu Deaf Association. “When people like [this man] arrive in Kathmandu,” Graif writes, “the deaf community is ready to provide them with a shared past and future.”

7. **SIGN LANGUAGE and CULTURE: Lexica and structure**

As I have shown, **SIGN LANGUAGE** and **CULTURE** are metalinguistically identified by Moresby signers as two discrete entities. They have different acquisition pathways and social fora of use. I now turn to their respective lexica. The majority of the **SIGN LANGUAGE** lexicon is drawn from ASE. Bolded signs in (3) and (8) will be familiar to readers with exposure to Auslan and other related sign languages including New Zealand Sign Language and British Sign Language. If they are literate, **SIGN LANGUAGE** users use the British two-handed fingerspelling system to spell names and fill lexical gaps. In addition, people use signs of local origin in their **SIGN LANGUAGE**. Some signs of local origin are also used when signing **CULTURE**, such as **FEMALE**. I observed other signs of local origin to be restricted to **SIGN LANGUAGE** conversations, such as **CAN’T-BE-BOTHERED**, **PAPUA-NEW-GUINEA** and **SEX**; **SIGN LANGUAGE** users employ different strategies to convey these concepts to **CULTURE** signers. In **SIGN LANGUAGE**, signers may switch between ASE-derived and local signs to index the same referent. It is not clear what drives this variation.

Ambient spoken language influence in **SIGN LANGUAGE** can be seen in the form of Tok Pisin mouthings; **HEARING** is commonly articulated with a mouthing of *tok tok* (Tok Pisin, from English ‘talk talk’). Tok Pisin influence is also evident in a **SIGN LANGUAGE** construction, [verb] **NOTHING**. In spoken Tok Pisin, [verb] *nating* means to do something in vain, uselessly, or for no reason (Mihalic, 1971, p. 140; Verhaar, 1995, pp. 185, 400–401). The construction [verb] **NOTHING** in **SIGN LANGUAGE** appears to be a calque of its Tok Pisin equivalent. The following example was uttered by Lucia to Noah, without me being present:

- (11) *ME SIGN*, [hearing people at a particular market] **LOOK LAUGH LAUGH NOTHING. NO RESPECT DEAF**.
 ‘When I sign [at particular market, the hearing people] stare and laugh for no reason/needlessly. They don’t respect deaf people.’

SIGN LANGUAGE, therefore, is a mix of ASE-origin signs with similar meanings to their ASE counterparts or, in the case of **SKON** (8), a different but related meaning. It also features signs of local origin, such as **HEARING** and **RESPECT**, and influence from Tok Pisin as in the mouthing that accompanies **HEARING**, and the construction [verb] **NOTHING**. Finally, some **SIGN LANGUAGE** users have incorporated foreign signs into their personal repertoires. In (6), Noah describes how he ‘plugs gaps’ in his **SIGN LANGUAGE** by borrowing signs from Auslan dictionaries. He and Lucia, who have spent time in Australia, Fiji and at transnational deaf gatherings like the World Federation of the Deaf, also use signs that I recognise as American Sign Language, such as **HAPPY**.

Turning now to **CULTURE**, in addition to its discrete acquisition pathways and social circumstances of use, this way of communicating can be defined as a way of signing that does not, as a rule, incorporate ASE elements. I say ‘as a rule’ because some signers who are identified by **SIGN LANGUAGE** users as **CULTURE** gradually come to incorporate ASE-derived **SIGN LANGUAGE** signs into their repertoires, as Richard is doing with his acquisition of **SIGN LANGUAGE SKON** (7). **CULTURE**, as a rule, includes lexical signs of only local origin. I presented a Swadesh-style pictorial wordlist (developed for Reed 2019a; see pp. 56–57) to **SIGN LANGUAGE** users in Moresby, and explicitly asked for **CULTURE** sign responses to the stimuli. Example (12) shows responses to the stimulus ‘bird’ from Emmanuel Leka (Moresby), Varo Matagu (Central province), and Johnny Hasu (Gulf province).

(12)



Three responses to the stimulus ‘bird’

BIRD in this form is a widely-shared **CULTURE** sign across idiolects. Other commonly recurring **CULTURE** signs include FEMALE (1), AEROPLANE (1), and SCHOOL (3). Other **CULTURE** signs are unique to particular individuals. Example (13) show responses to the stimulus ‘tree’:

(13)



Three responses to the stimulus ‘tree’

Each of these **CULTURE** signs has different forms. Emmanuel’s sign for ‘tree’ appears to refer to the round foliage of a tree; Varo’s to the denseness of a forest; and Johnny’s to the trunk.⁴ Consider now (14), from a narrative by **CULTURE**

4. Here, I take well Nick Palfreyman’s point that this variation may be due to the signers highlighting different aspects of the referent in the moment of utterance, rather than being representative of different standalone lexical signs. I leave this possibility for the moment, however.

signer Raikos Kanak from Eastern Highlands province. Raikos uses the widely-shared **CULTURE** sign **BIRD**, as well as his own sign for ‘tree’. This ‘tree’ sign happens to be the same as Johnny’s in (13), although both men come from provinces many miles apart (see Map 1).

(14)



Hands: **TREE**

DRAW-BACK-BOW

BIRD

Trans: ‘There was a tree; I drew back my bow to shoot a bird.’

In addition to using both widely-shared and idiosyncratic signs of local origin, **CULTURE** signers use a high degree of depiction (Ferrara & Hodge, 2018; Liddell, 2003). That is, **CULTURE** signers regularly depict, or show, their meaning through ad-hoc, creative strategies including enactment, constructed action, or pantomime (Cormier, Smith, & Zwets, 2013; Hodge & Ferrara, 2014; Metzger, 1995). Example (15) shows how Ume Alahu, a **CULTURE** signer, enacts how he paddles a canoe and watches for fish. He then depicts the long-sleeved clothes he must wear in order to prevent being bitten by insects while doing so, grabbing his wrists in turn. He expresses the idea of biting insects by enacting slapping his arms and lower legs.

(15)



Hands: **PADDLE**

WATCH-INTENTLY

Trans: ‘I paddled and paddled and then I waited, watching [the water for fish].’



Hands: LONG-SLEEVES

BITING-INSECTS

Trans: ‘I wore long sleeves as there were many biting insects.’

CULTURE signers may also speak or mouth certain words with or without signing; in this same session, Ume spoke the name of his home village to his interlocutor, exaggerating his mouth movements while doing so. **CULTURE** signers also regularly make reference to objects in the environment in order to make meaning. In (16), Richard pantomimes reading a book to describe his time at school. He reinforces this by pointing to an exercise book on the table. In (17), while talking to Ume (a **CULTURE** signer), Noah refers to ‘black skin’ by rubbing an index finger on his forearm and indicating the thin black band on his *bilum* (bag).

(16)



Hands: READ-A-BOOK [point to book on table]

Trans: ‘[At school] I would read a book, like that one.’

(17)



Hands: SKIN

[point to colour on *bilum*]

Trans: '[The one deaf man with] black skin.'

CULTURE signers also regularly trace images, letters or numbers on their body, the floor or the air. During the remainder of his narrative in (16), Richard describes the various things that were taught at school, pointing to the physical blackboard in the room he is being filmed in, and tracing English letters and numerals in the air and on his forearm. Richard also attempts to convey the concept of 'carrot' by tracing the shape of a carrot on the floor of the room using his hands (Reed [2019d] contains video of this sequence). These diverse strategies accord with Moriarty Harrelson's (2017) experience of how deaf people in Cambodia communicate if they have not been exposed to a school-based sign language; namely, how they recruit sign, gesture, drawing, and objects in the environment.

Thus, **CULTURE** sign lexica include, as a rule, signs that are not of ASE origin. **CULTURE** ways of signing also include a high degree of enactment, and reference to objects in the environment. **CULTURE** signers may further speak or mouth elements of spoken or written language, and trace letters, numbers or images on available surfaces. **SIGN LANGUAGE** users also use these strategies, but on my observation, they do so to a lesser degree as they have recourse to a larger, shared lexicon of signs.

The signers I have showcased in (14–17) were all identified to me by self-identified **SIGN LANGUAGE** users as **CULTURE**. From an etic point of view, I also noticed that these **CULTURE** signers did not know many (or any) **SIGN LANGUAGE** signs. At the same time, during my fieldwork I met deaf people who, by my assessment, knew **SIGN LANGUAGE**, but were described by either themselves or others as **CULTURE**. For example, during the week-long interpreter workshop which saw several deaf people from different provinces fly into Moresby, I met Thecla, a deaf woman from Buka. Thecla used many signs that I recognised to be of ASE origin and spoke a considerable amount of Tok Pisin alongside her signing. I noted the following in my fieldnotes:

- (18) [Another deaf man] & Thecla (Buka) don’t understand rapid-fire convos in PNGSL. [A deaf woman] pointed to Thecla & said She’s **CULTURE**.
(Fieldnotes, 5 November 2018)
- (19) Thecla & [the deaf woman] friends now. Thecla – I want to learn sign language. [I am] culture. Yesterday I sat, I felt frightened, I didn’t understand. [In my opinion] – Thecla can sign.
Thecla to Noah: You sign so nice. My signs are so old! You mas lainim mi [you must teach me].
(Fieldnotes, 6 November 2018)

Therefore, **CULTURE** is also defined by at least some PNG deaf people as signing that may feature **SIGN LANGUAGE** elements, but that does not constitute ‘good’ or ‘new’ **SIGN LANGUAGE**.

8. ‘Switching caps’: A metalinguistic sign

Some deaf people in Port Moresby explicitly describe how they move between ways of communicating by using a particular, indigenous, metalinguistic sign, **SWITCH-CAPS**. In (20), Joe Yalupe is telling me how he learned **SIGN LANGUAGE** from Noah and Josh at Red Cross. Joe began learning **SIGN LANGUAGE** at around 18 years old when he arrived in Moresby from the Highlands, and before then, had exclusively used **CULTURE** for his entire life. Joe explains how he switches between two ways of communicating: **SIGN LANGUAGE** and **CULTURE**. Of note, here he refers to **CULTURE** as **FEMALE MALE**. Example (21) shows the original signed utterance that constitutes the final part of (20).

- (20) [When I came here I only knew] **FEMALE MALE**. I was taught **SIGN LANGUAGE**... Noah and Josh taught me. I **SWITCH-CAPS** to **ENGLISH SIGN LANGUAGE**, **SWITCH-CAPS** to **FEMALE MALE**, and then **SWITCH-CAPS** to **ENGLISH SIGN LANGUAGE**.

(21)



Hands: **SWITCH-CAPS**

Trans: ‘I **SWITCH-CAPS**’



Hands: **ENGLISH**

SIGN

LANGUAGE

Trans: 'to **ENGLISH SIGN LANGUAGE**'



Hands: **SWITCH-CAPS**

Trans: 'SWITCH-CAPS'



Hands: **FEMALE**

MALE

Trans: 'to **FEMALE MALE**'



Hands: **SWITCH-CAPS**

Trans: 'and then **SWITCH-CAPS**'



Hands: **ENGLISH**

SIGN

LANGUAGE

Trans: ‘to **ENGLISH SIGN LANGUAGE**’

In the next example, (22), Joe explicitly states that he ‘switches caps’ to communicate with **CULTURE**, or **FEMALE MALE**, signers like Richard. Richard is Glennish’s employee (see [7] and [16]).

(22) **Lauren:** Now when you two [Glennish and Joe] **TALK**, you **USE SIGN LANGUAGE** or **USE CULTURE**?

Joe: Her and me? **SIGN LANGUAGE**. We **SWITCH-CAPS**, **SWITCH-CAPS** when we go out [and meet] **FEMALE MALE** [signers].

Lauren: Like Richard?

Joe: Like Richard. That’s right.

SWITCH-CAPS is not only a way of describing how to ‘switch’ between **SIGN LANGUAGE** and **CULTURE**. One may also ‘switch caps’ between ways of communicating more generally. Apo used to live in Lae, a city that signers in Moresby report is home to another deaf community. In (23), Apo describes ‘switching caps’ between how he communicates in Lae *vs* in Port Moresby, but without explicitly denoting whether the way of signing in Lae is **SIGN LANGUAGE** or not. Example (24) shows the original signed form of Apo’s final utterance in (23).

(23) **Lauren:** Do you have a lot of deaf friends in Lae?

Apo: Friends [in Lae]? Yes, yes. Everyone comes together and is glad. Everyone signs a lot, with energy. It’s good and happy.

Lauren: Same **SIGN LANGUAGE** as here in Port Moresby?

Apo: [Thinks] Sort of. A few. Moresby is **DIFFERENT**, Lae is **DIFFERENT**, Goroka is **DIFFERENT**. I have a Moresby cap. When I go to Lae, I **SWITCH-CAPS**.

(24)



Hands: ME

[point to ground]

CAP

Voice: mi

Mospi

kep

Trans: 'I have a Moresby cap.'



Hands: GO

Voice: ko Lae

Trans: 'When I go to Lae,'



Hands: SWITCH-CAPS

Voice: –

Trans: 'I SWITCH-CAPS.'

In my fieldnotes, I noted Joe's reaction upon me showing him a recording I had made in the Highlands of an interaction between a rural deaf man and a younger, **SIGN LANGUAGE**-using deaf woman. In this interaction, the woman insisted on trying to teach the man several **SIGN LANGUAGE** signs. After the interaction had ended, I spoke with the deaf man in question and he told me that he didn't understand anything that she had said. After Joe viewed this recording, I noted that Joe said the following to me:

(25) He doesn’t understand her. She needs to SWITCH-CAPS.

(Fieldnotes, 25 October 2018)

Joe’s comment hints at a language ideology within the Moresby deaf community: namely, that **CULTURE** signers are worth communicating with – worth ‘switching caps’ for. I now move to an analysis of what ‘switching caps’ actually looks like; how conversations between **SIGN LANGUAGE** and **CULTURE** users in Moresby unfold.

9. ‘Switching caps’ in practice

All **SIGN LANGUAGE** users I met in Moresby can use two ways of communicating: **SIGN LANGUAGE** and **CULTURE**. The acquisition pathway of **CULTURE** means that this is the first way of communicating many PNG deaf people use, whether they go on to acquire **SIGN LANGUAGE** in the future or not (see [1]). Even deaf people who used mainly speech (not **CULTURE**) with their hearing families appear to be competent users of **CULTURE** by virtue of needing to use this way of communicating in certain social circumstances.

In (26), Noah, a competent **SIGN LANGUAGE** user, is talking to Ume, a **CULTURE** signer. The message Noah wants to convey to Ume is, “Lucia is from Oro Province.” Noah uses a variety of multimodal semiotic strategies to convey the message. These strategies are tailored to what Noah knows Ume has in his semiotic repertoire. From interacting with Ume previously, Noah knows that Ume can read and write, and that Ume knows the **SIGN LANGUAGE** fingerspelling system. Noah assumes that Ume, as a fellow Papua New Guinean, will be able to recognise Noah’s depiction and enactment of Oro Province’s (i) distinctive dotted face-painting style, (ii) distinctive dance style, and (iii) the butterfly that is referenced in both the dance and on the Oro Province flag.⁵

(26)



Hands: [point to Lucia]

Trans: ‘She’s from’

5. An enactment of the Oro butterfly dance, with traditional face-painting, can be seen here: <https://www.youtube.com/watch?v=Po4kgz29zG8>



Hands: **O**

R

O

Trans: 'Oro Province'



Hands: **FACE-PAINTED-LIKE-SO**

Trans: 'where they paint their face like so'



Hands: **DANCE-LIKE-SO**

Trans: 'where they dance like so'



Hands: **BUTTERFLY**

[point to Lucia]

Trans: 'and are associated with the butterfly. That's her.'

Incidentally, the sign **BUTTERFLY** that Noah uses is a **SIGN LANGUAGE** sign, or is at least identical to **BUTTERFLY** in ASE. It seems that Noah is confident that the form-meaning relationship of this sign is transparent enough for Ume to grasp, in the way that Glennish determined that the form-meaning relationship between **SKON** and actual *skon* would be too opaque for Richard to grasp (see [7-9]). Ume responds to Noah by first miming a dance, which Noah shakes his head at. Noah repeats the butterfly dance movements. Ume mimics this and says "Oro, Oro" to Noah, who nods.

Thus, in switching to **CULTURE**, **SIGN LANGUAGE** users may use **SIGN LANGUAGE** signs if they make an on-the-fly assessment that these will be transparent to the **CULTURE** signer. They also make an assessment of their interlocutor’s individual semiotic repertoire, based on their previous interaction with that person (Noah knowing that Ume knows how to fingerspell) and/or based on assumption given that person’s characteristics (Noah knowing that Ume, as a Papua New Guinean, will likely be able to recognise Oro Province’s cultural characteristics).

SIGN LANGUAGE users also use paraphrase to convey concepts to **CULTURE** signers, somewhat similarly to how Allsop, Woll and Brauti (1994, p. 181) describe some utterances in International Sign. During a conversation between himself, Lucia, and **CULTURE** signers Richard and Raikos, Joe directs the **SIGN LANGUAGE** sign **AUSTRALIA** to Lucia. In the same conversation, Lucia conveys the concept of ‘Australia’ to Richard and Raikos through a paraphrase, using the widely-shared **CULTURE** sign **WHITE-PERSON** and an enactment of a kangaroo’s bouncing and its outtheld arms. Lucia chooses not to use the sign **AUSTRALIA**, likely deciding this will be opaque to the two **CULTURE** signers.

During my fieldwork, I attended a meeting of the PNG Deaf Association in Moresby. During the meeting, deaf members addressed the group in **SIGN LANGUAGE**. Lucia and Joe took turns to stand alongside the presenter and interpret their signing. Lucia and Joe directed their interpretation to **CULTURE** signers Richard, Ume and Raikos. Later in the meeting, I recorded the following in my fieldnotes about how presenter Josh Yembo, using **SIGN LANGUAGE**, jokingly admonished the audience for watching Lucia instead of him:

- (27) She’s interpreting for them. Their SL [sign language] is different. You all look at me! (joking) of Lucia interpreting for Richard and Ume (watching transfixed).
(Fieldnotes, 21 October 2018)

The **CULTURE** interpretation during this meeting featured chaining; that is, where information is repeated using paraphrases or different semiotic strategies (Bagga-Gupta, 2000). While interpreting, Lucia chained together three different ways of indicating ‘a lot’: (i) the sign **MANY**, (ii) a depictive sign indicating ‘an enormous quantity’, articulated with her arms at full length and her mouth open, and (iii) a sign or gesture depicting a large, bounded quantity. In order to express the concept ‘seven million’, Lucia also chained together two different ways of expressing ‘seven’: (i) holding up five fingers on one hand and two on the other, and (ii) clasping two fingers in a fist, which is a typical way of expressing ‘seven’ in finger-counting in PNG. To then express ‘million’, Lucia repeated the same sign or gesture depicting a large, bounded quantity. Of note, Noah also chained during the same portion of the meeting, but using **SIGN LANGUAGE**. He (i) wrote ‘7 million’ on the whiteboard, (ii) used the **SIGN LANGUAGE** sign **SEVEN**, (iii) used the **SIGN**

LANGUAGE sign **MILLION**, and finally (iv) pointed at '7 million' written on the whiteboard.

To summarise, **SIGN LANGUAGE** users 'switch caps' to **CULTURE** by using a diverse range of semiotic strategies. According to their assessment of their interlocutor's semiotic repertoire, they make use of **SIGN LANGUAGE** signs or elements (such as fingerspelling). They also tailor their communication to what they assume will be salient to their interlocutor, based on their assessment of their interlocutor's life experiences. **SIGN LANGUAGE** users recruit objects in the environment, paraphrase, depiction, enactment, and chaining to make themselves understood to **CULTURE** signers. **SIGN LANGUAGE** users may also use **SIGN LANGUAGE**, if they assess that the form-referent relationship will be easily understood by their interlocutor. How, though, do **SIGN LANGUAGE** users *understand* a **CULTURE** signer's communication, particularly when there is such diversity in **CULTURE** signs, as described in Section 7? Apo Yosman reflects on this:

- (28) I know one old deaf man from Gulf Province. The first time I met him, I noticed his **SIGN** was different. I didn't understand it. He did a sign like this: [pat hand twice on open mouth, trace index finger through sky]. I didn't say to him, "Huh? What's that?" I sat back and kept my mouth shut. Time went on... I kept watching. The man did the sign again and again and counted in between doing it. What did it mean? **MONTH. MONTH.** [pat hand twice on open mouth] means **MONTH.** [fingerspells] **M-O-N-T-H.**
- (29) Another man from Wabag, I know him, we are best friends...near my house, he sells betelnut. He was **SIGN** [signing] to me. I looked, and thought "hmm..." I know the signs **DIE** and **DIE.** **DIE,** I understand. But he did like this [tosses head back with closed eyes]. What does that mean, I thought? ...It was **NICE.** I asked him, and he said **DIE SLEEP.** It's his [sign].

Apo, then, either allows the meaning of unfamiliar **CULTURE** signs to arise from context, or explicitly asks for clarification of these.

10. The Moresby situation compared to other bilingual sign situations

In Moresby, a school-based way of signing (**SIGN LANGUAGE**) associated with urban areas coexists alongside a non-school-based way of signing (**CULTURE**) associated with rural areas. These different ways of communicating are identifiable based on (i) the community's explicit naming of them and explicit expression of how they SWITCH-CAPS between these two ways, (ii) **SIGN LANGUAGE** and **CULTURE**'s different acquisition pathways and (iii) social circumstances of use, and (iv) consistent differences between the two ways in lexicon and structure.

In other unimodal bilingual situations, such as in Ghana between Adamorobe Sign Language and Ghanaian Sign Language (Kusters, 2014, 2019) or in Israel between Algerian Jewish Sign Language and Israeli Sign Language (Lanesman & Meir, 2012), the sign languages in question both had multigenerational time depth before they came into contact (see Section 3). In comparison, **SIGN LANGUAGE** is no more than 30 years old, if dated from 1990 when ASE was reportedly first introduced to PNG and when deaf education was first formalised in the country. **SIGN LANGUAGE** has been in constant contact with **CULTURE** since its inception, by virtue of the fact that almost all **SIGN LANGUAGE** users were or are **CULTURE** signers. In Moresby, the accepting nature of the deaf community means that **CULTURE** signers enter the community regularly. As mentioned in Section 4, rural-to-urban migration is common in Moresby. Thus, there is a small but constant stream of rural **CULTURE** signers migrating to Moresby, and a portion of these steadily entering the Moresby deaf community.

If **SIGN LANGUAGE** is no more than 30 years old, how old is **CULTURE**? As I have shown, **CULTURE** communication is highly idiolectal, although there are some shared signs and some recurring communicative strategies (such as ready reference to objects in the environment). No deaf person I met had a deaf parent; therefore, no deaf person I met had learned **CULTURE** (or **SIGN LANGUAGE**) from deaf parents. An individual’s **CULTURE** way of communicating may be somewhat inherited from their hearing family members and communities, who may have developed their own **CULTURE** way of communicating by virtue of exposure to other deaf people they had come into contact with previously, and by virtue of common gestures in PNG (such as a negative hand gesture and finger-counting system) (see Reed, 2019a, pp. 104–116). For the most part, though, I argue that a **CULTURE** idiolect is as old as its central deaf user. The shallow generational depth of both **SIGN LANGUAGE** and **CULTURE** means that these ways of communicating are co-evolving in a way that is dissimilar to other bilingual sign situations such as those in Adamorobe and Israel.

School-based ways of signing coexist with non-school-based ways of signing in Moresby, Nepal, India and Cambodia (see Section 3). The situation in Moresby is similar to that in Nepal, in that both Moresby and Nepali deaf people explicitly name **CULTURE** and **NATURAL.SIGN** respectively. In Green’s rural fieldsite, there are conventionalised ‘natural signs’ (Green, 2014, pp. 179–180), while in India, there are conventionalised gestures used between deaf and hearing people – some of which are also Indian Sign Language signs (Kusters & Sahasrabudhe, 2018, pp. 55–57). Jepson (1991, p. 44) notes that in “Rural Indian Sign Language”, signs derived from “village gesture” tend to recur across idiolects, while other signs are unique to families or groups of acquaintances. Similarly, in Moresby, there

are well-known, widely shared **CULTURE** signs, such as **FEMALE**, **BIRD** and **WHITE-PERSON**, in addition to other signs that are unique to idiolects.

In terms of the future shape of **SIGN LANGUAGE**, as mentioned in Section 5, a PNGSL dictionary is in production by NGO Callan Services. The signs for this dictionary were decided by groups of deaf people brought together by Callan, who then went through the old Melanesian Sign Language dictionary and accepted or rejected signs. Most ASE-origin signs were reportedly retained. Where the committee of deaf people rejected a sign, they were encouraged to select or coin a different one; many ‘new’ signs are widely known **CULTURE** signs (including **BIRD** and **FEMALE**) or are based on typical **CULTURE** referents (such as the new sign **MORNING**, which refers to the sunrise). This in part reflects practice, as **SIGN LANGUAGE** users do switch between ASE-derived and local variants (see Section 7). At the same time, the dictionary is not documentation, but rather partial language relexification. It remains to be seen both how widely the new signs will be adopted, and whether the dictionary, once published, shifts the language attitudes of Moresby signers closer to those of Cambodian signers learning one of the school-based systems. Recall Moriarty Harrelson’s (2017) report that Cambodian signers using a school-based system do not value non-school-based ways of signing; also compare Senghas (2003, p. 270) who details conflict between users of new, “proper” signs and old, “ugly” signs in Nicaraguan Sign Language.

Returning to the theoretical divide in Section 2, it is difficult to examine **SIGN LANGUAGE** and **CULTURE** under the standard bilingualism paradigm because both ways of communicating resist classification as discrete languages in a structural sense, to different degrees. **SIGN LANGUAGE** does have greater degree of conventionalisation than **CULTURE**, drawing as it does on the large, ready-made lexicon of ASE. At the same time, in practice, **SIGN LANGUAGE** has a degree of idiolectal variation. Recall Lucia and Noah’s incorporation of American Sign Language signs into their repertoires, as mentioned in Section 7; Noah’s incorporation of Auslan signs into his (6); and Michael and Apo’s habit of using Tok Pisin words with their signing (at least when communicating with a hearing signer) (3, 24). **CULTURE** is in turn even more idiolectal, with different **CULTURE** signers making use of greater or lesser degrees of speech, of shared signs, and of elements of written language, whether in the form of **SIGN LANGUAGE** fingerspelling or tracing letters on the body.

Even if the assumed requirement of discrete languages is relaxed, the contact between **SIGN LANGUAGE** and **CULTURE** since their relative inceptions makes it difficult to work out where one way of communicating ends and another begins. **SIGN LANGUAGE** users regularly use both ASE-derived **FEMALE** and **CULTURE FEMALE**, and **FEMALE** will reportedly be incorporated as an official sign in the new PNGSL dictionary. Is **FEMALE**, then, a **SIGN LANGUAGE** sign? At the same

time, FEMALE is arguably the most prototypical CULTURE sign, to the extent that CULTURE is also known as FEMALE MALE. Is the use of FEMALE in SIGN LANGUAGE utterances code-switching, borrowing, or some sort of language mixing? The standard bilingualism paradigm seems to strain when the ways of communicating – ‘languages’ or not – have such young histories that have been so intertwined. In addition, the same challenges faced by Zeshan and Panda (2015) also apply to the Moresby situation. Namely, the lack of documentation of SIGN LANGUAGE makes it difficult to identify when monolingual behaviour stops and bilingual behaviour begins, as do strategies that recur in both SIGN LANGUAGE and CULTURE (such as the use of pointing signs and depiction).

In approaching the Moresby sign situation, translanguaging’s focus on the idiolect becomes more useful. Translanguaging allows CULTURE signers to be brought into the same domain of inquiry as SIGN LANGUAGE users, rather than denoting SIGN LANGUAGE as ‘language’ and CULTURE as ‘something else’. It also removes the need to segment utterances strictly into SIGN LANGUAGE and CULTURE, and instead focus on individuals’ variable ways of communicating. Translanguaging explicitly licenses a bottom-up approach, looking first at users’ idiolects, and then identifying the patterns that link those idiolects. This focus on the individual will also be helpful in analysing why certain signs may go on to become more widespread in the Moresby community; if, for example, Lucia and Noah’s American Sign Language HAPPY becomes over time more widely used, by virtue of this couple being influential members of the community.

This focus on the idiolect, though, is still somewhat of an etic perspective. The emic perspective is that despite the diversity in SIGN LANGUAGE and CULTURE, they form two discrete ways of communication; two languages in the sociocultural sense. Here lies the risk, then, of the translanguaging approach, as highlighted by Cenoz and Gorter (2017) and De Meulder, Kusters, et al. (2019). Namely, too much of a focus on ‘the individual’ and their ‘creativity’ and ‘fluidity’ can erode community-level development goals of respecting each way of communicating as a discrete, worthwhile entity. Noah wrote to me in English several times over the course of my fieldwork that he wanted interpreters to develop “bicultural competency”, by which I understood him to mean the capacity to communicate in both SIGN LANGUAGE and CULTURE. This may be challenging from a policy and educational point of view, given CULTURE’s diversity, but the community’s own desire is that CULTURE be reified on the same level as SIGN LANGUAGE.

From a scientific point of view, it is critical that in small or young signing communities, the initial focus at least should be on the individual, family, or other small-group level (for examples of this approach, see Goico, 2019; Haviland, 2014; Horton, 2020; Hou, 2016; Reed 2019a). Some documentation seems to begin from the assumption that ways of communicating in these types of signing communities

form homogeneous “linguistic monoliths”, to use Hoffmann-Dilloway’s (2016, p. 15) term. New sign researchers in particular are quick to give monolithic capital-letter or other designations for emerging ways of communicating in sign, arguably without doing the necessary idiolectal or familylectal level of analysis. For example, an investigation into “Maxakalí sign” starts with only cursory notes on the community characteristics of this way of signing; it is described as an “incipient village sign language” used in the Mina Gerais region of Brazil (Stoianov & Nevins, 2017). The remainder of the analysis is focused on phonology. Without understanding the social characteristics of the signers in this community or communities, it is difficult to contextualise the authors’ insights. Similarly, Kisch (2012) argues for a more fine-grained investigation into the purported generations of Al-Sayyid Bedouin Sign Language signers, and also of the various social networks different signers navigate, which may influence their signing. Micro-ethnographic analysis like this may be slow, but ultimately leads to greater insights.

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Abstract (Australian Sign Language)

<https://doi.org/10.1075/aplv.19010.ree.video>

Abstract (Tok Pisin)

Planti ol stadi bilong ol manmeri husat i save long tupela tokples, wantaim ol stadi bilong pasin bilong miksim tupela o tripela we bilong toktok, ol i wok long skelim hau ol dispela lain i save toktok long maus. Tasol yumi nogat gutpela save long pasin bilong ol manmeri i save toktok long eksen – hau ol i save wokim eksen long tupela o tripela kain tok-eksen? Em i dispela samting mi laik rait long en. Mi bai givim wanpela stori bilong wanpela eksen-tok ples (tok-eksen) long Port Moresby. Taim mi bin wok long stadi long dispela tok-eksen, mi bin stap na eksenim wantaim ol yaupas lain. Mi bin kisim eksen bilong ol long kamera, na bihain mi lukluk long dispela piksa na stadi long eksen bilong ol taim ol i bin stori wantaim narapela.

Ol yaupas lain bilong Port Moresby ol i save long tupela we bilong eksenim. Nem bilong dispela tupela we em i SIGN LANGUAGE (tok-eksen bilong PNG) wantaim CULTURE (tok-eksen bilong ples). *Tok-eksen bilong PNG* em i gat 30 krismas, na em i bihainim planti eksen bilong Australasian Signed English. *Tok-eksen bilong ples* em i narapela kain tok-eksen: wanwan yaupas man o meri i bin mekim, na em i kamap. Na olsem na bai yu lukim, planti eksen bilong dispela tok i bin kirap long kainkain ples (wankain olsem ol tokples), planti taim ol bai wokim liklik drama, na tu, wanwan manmeri husat i save long dispela tok-eksen em bai tanim liklik eksen bilong ol. Maski *Tok-eksen bilong PNG* em i wampela yangpela tok-eksen, ol yaupas lain husat i save long en, ol i kamapim wampela kain eksen (SENIS-KEP) long makim wanem taim ol i laik kalap long narapela tok-eksen. Mi stori long hau dispela kain pasin bilong toktok long eksen long Port Moresby i wok long salensim tupela we bilong stadi toktok: stadi bilong ol lain i save long tupela tokples, wantaim stadi bilong pasin bilong miksim tupela o tripela we bilong toktok.

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