Fieldwork and first language acquisition

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This paper examines best-practice frameworks for reporting data in the field of first language acquisition. It investigates the challenges these may present for researchers of lesser-known, under-described languages with small communities of speakers whose members are highly mobile for ceremonial and family reasons. This paper is offered as a springboard for discussion around how best to integrate the rigor of data collection and analysis required for language development research with the study of typologically diverse languages, often spoken in remote communities.

Keywords: language acquisition, fieldwork, typology

1. Introduction

Researchers in first language acquisition have long been interested in investigating the ways that language, culture and cognition come together in the speech directed to children and in the unfolding process of acquisition. One aim of language acquisition research is to account for biological dispositions for language and how these interact with socio-cultural mechanisms of acquisition. In order to address this aim the field needs to take into account data from the broadest typological array of languages and language-learning environments (e.g. Bowerman 2011). The documentation of acquisition in different languages enables researchers to investigate potential universals of child language and child directed speech, through a comparison of the temporal and sequential stages of
the acquisition process, and of the grammatical, lexical, conversational and narrative skill development.

The aim of this paper is to investigate the extent to which lesser-known languages, often spoken in remote communities, are studied in the field of first language acquisition (henceforth FLA or acquisition). In doing so, we also examine best-practice frameworks for collecting and reporting first language acquisition data. The paper highlights difficulties these frameworks may present for researchers of lesser-known, under-described languages with small communities of speakers, whose members may be highly mobile for ceremonial and family reasons. This paper is offered as a springboard for discussion around how best to integrate the rigor of data collection and analysis required for language development research with the study of typologically diverse languages, often spoken in remote communities.

2. Where we’ve been

The late 1960s through to the early 1980s was a time of great promise in the field of FLA. Dan Slobin and colleagues moved beyond the established research paradigms of developmental psycholinguistics, integrating work from psychology, sociology, anthropology and linguistics (Duranti, Ochs & Schieffelin 2011). Slobin edited *A Field Manual for Cross-cultural Study of the Acquisition of Communicative Competence* (Slobin 1967) in order to document the kinds of empirical research important to the field, regardless of its genesis. Slobin went on to compare the developmental trajectory of children learning a broad range of languages. His typological comparisons in acquisition focused on what is universal and what is language specific (Slobin 1982), and he later edited the now classic series *The Crosslinguistic Study of Language Volumes I-V* (1985-97).

Slobin’s work and that of other Berkeley researchers in areas both within FLA such as Susan Ervin-Tripp, and outside FLA, such as John Gumperz, laid the foundation for cross-linguistic, cross-disciplinary research in child language. Later work in the vein included Ochs (1982) and Schieffelin & Ochs’ (1986) studies of child directed speech in the lesser-known research communities of Papua New Guinea and Western Samoa. This research brought excitement and a new perspective to the field and later influenced theory to a very large extent, for
example by showing that contrary to popular belief at the time, Western middle-class cultural practices such as modified input forms (then known as motherese) are neither universal, nor necessary for a child to learn a first language. Further, this work also held real promise that acquisition researchers might start working beyond the European and to a lesser extent, Asian languages that had hitherto been the focus of the field.

Ochs and Schieffelin’s work showed, for example, that caregivers interpret children’s babbling or unintelligible speech according to the beliefs of the wider community regarding their role as potential conversation partners. More importantly, they showed that for children learning language in Western Samoa or Papua New Guinea, there are few adjustments made to adult speech when they speak to young children. Young children are rarely addressed since they are not considered appropriate or competent conversational partners (Ochs & Schieffelin 1984; Schieffelin & Ochs 1986). Important as this finding was in the 1980s, it has evolved to become even more so and has since shaped the field of developmental linguistics by showing that something considered fundamental to acquisition is culturally mediated and not necessary to language development. This research highlighted the largely English-based middle-class-centricity of the field and paved the way for different approaches to developmental research which have since been widely adopted.

However, despite the promise of this earlier typologically diverse work, when we fast-forward 30 years we do not see a boom in the study of FLA in typologically diverse languages and culturally different communities, as we may have anticipated. Since that time the field in general has continued to have a strong reliance on a small number of (largely European) languages and a focus on aspects of Western middle-class culture.

3. Examining typological diversity in FLA research

In order to examine the extent to which typological diversity is being captured in current FLA research, we examined the array of languages presented in the two primary journals of the field, *Journal of Child Language* and *First Language*. Additionally, we examined data from three very influential child language conferences: International Association for the Study of Child Language (IASCL);
Boston University conference (BU); Child Language Symposium Manchester (CLS).¹ Table 1 presents data indicating the languages other than English which were focused on in the journals across 50 articles from 2012-2013 and at the conferences spanning 2011-2013. Languages presented in papers focusing on bilingual acquisition have carets (^) beside them and the asterisks (*) indicate languages where there was more than one paper.

As can been seen in Table 1, across these journals and conferences there is not a lot of diversity. Spanish is the most widely presented (apart from English) as the focus of papers in all venues except CLS, followed by French and Dutch and German (across three venues). Of non-Indo-European languages Mandarin, Japanese & Turkish are highest with representation at two venues.

Table 1 indicates that the field is dominated by a small number of languages, with a smattering of others that have had some research focus but are underrepresented. In order to examine how regularly some of the less-represented languages are studied we took a sample of 50 papers from the Journal of Child Language, across 2012-2013, working back from the end of 2013 until we reached 50 papers in total. Results for language use are presented in Figure 1.

¹ Of course, there are other FLA-focussed publications apart from these, such as the recently published edited volume The acquisition of ergativity (Bavin & Stoll 2013), which may have a broader range of languages represented. However, since these journals and conferences are the primary locations for dissemination of FLA research, we have focused on these for present purposes.
Table 1. Language focus (other than English) of papers scheduled for presentation/publication 2011-2013 in child language arenas

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Table 1. Language focus (other than English) of papers scheduled for presentation/publication 2011-2013 in child language arenas
Figure 1 indicates that of papers published in the *Journal of Child Language* 82% (n=41) focused on English, 4% (n=2) focused on Spanish, and the rest of these languages (14% n=7), Catalan, Danish, Dutch, Turkish, French, German, and Mandarin were represented in a single paper throughout this period. Naturally, the snapshot may look different at different periods in time but the trend of an overwhelming majority of English-based papers holds generally across the field.

FLA’s tendency toward a large representation of a small number of languages does not correspond with the typological diversity evident in many other fields of linguistics and is surprising for an area that is heavily focused on cognitive influences in language. Linguistics in general deals with an overwhelming diversity of information across the world’s languages. This has implications for the field of FLA since if we are to have a comprehensive understanding of all that occurs as part of the acquisition process, it is absolutely crucial that we look at the broadest possible array of languages. We must also document and examine the diverse socio-cultural practices that may exist for a child when they are learning their first language.

One reason for the low numbers of research languages being reported in these top journals and conference programs is the fact that there is comparatively little FLA research being undertaken on lesser-known languages, particularly those spoken in remote communities. Certainly, there has been excellent research in
such languages, and one of the best examples is Katherine Demuth’s very broad data collection and research on Sesotho, although compared to the major languages, and English in particular, such research is rare. Since the early 2000s there has been a growing number of researchers working on first language acquisition in remote or relatively remote communities. This includes people working in Australia (e.g. our project on the acquisition of Murrinhpatha\(^2\)), Papua New Guinea (e.g. Alan Rumsey and Francesca Merlan’s project on children’s language learning and intersubjectivity in Ku Waru) and Nepal (e.g. Sabine Stoll and Elena Lieven’s project on the acquisition of Chintang\(^3\)), among others. In the remainder of the paper we highlight and discuss some of the implications and challenges of this type of research in the field of first language acquisition more broadly.

4. **What does it mean to collect robust FLA data?**

High-quality first language acquisition research involves multiple aspects that underpin what would be considered to be good-quality research. Essentially, these are benchmarks of best practice for collecting robust data, that can be used to further the broad aims of determining how children learn language and providing a means of more deeply understanding language in general.

4.1 **Familiarity with the target language**

An *a priori* expectation in language acquisition research is that any researcher investigating language development would have a strong understanding of the target language. Researchers should at a minimum be familiar with the language and not rely entirely on an intermediary for all translation and language practice information.

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\(^2\) http://languages-linguistics.unimelb.edu.au/current-projects/lamp

\(^3\) http://www.spw.uzh.ch/clrp/acquisition-projects.html
4.2 Representative sample

Adequate sample sizes are necessary for allowing comparability. A brief examination of cross-linguistic studies in FLA journals indicates that for experimental data, and cross-sectional sampling, most studies have around 12 participants per age group. In longitudinal studies there are generally four to six children per age group. In the 1970s and early 1980s people generally were looking at two to three children per age group, but it seems to have moved toward higher numbers in more recent research.

4.3 High demands on data requirements

In an ideal scenario, longitudinal and cross-sectional data would be collected across a range of genre, interactional contexts and a range of tasks. Concomitant with this is an expectation of high-quality recordings with low variability in recordings and recording contexts. Ideally, there would be an ability to do some sort of inter-coder reliability testing, which means that there needs to be multiple people who have access to the children's language and that also have the capacity to code the data in some way. It is also expected that there would be both regular and frequent intervals for recording the data, in particular in longitudinal studies, but also in cross-sectional studies that there might be some sort of follow-up.

4.4 Replicable methods and findings

An underlying expectation of FLA research is the possibility of a replicable study. Replicability is crucial both within a language and across languages since as a field we are focused on how children learn language and what is potentially universal versus language specific, as well as culturally mediated. For this reason, methodologies are highly important in acquisition research. If later researchers embark on comparative research to investigate what factors are necessary in order for a child to acquire a first language, they need to be able to replicate what others have done previously.

Each of the areas highlighted above are factors we consider as being crucial to first acquisition language research, but often hard to achieve in FLA research based on remote-area fieldwork with small communities. As we shall detail below,
researchers who have looked at this in some detail within the field have considered modifications in fieldwork situations (Lieven and Stoll 2013, Eisenbeiss 2006). In particular, such modifications are relevant for linguists, anthropologists and others who are working on language documentation and description and who would like to additionally collect child language data. We turn now to some of these discussions.

5. FLA and language documentation

Eisenbeiss (2006) has highlighted the benefits for integrating the collection of child language data into any sort of language documentation project. In part this is motivated by the question: Why do researchers describe the language of adults and not the language of children? In addressing this it appears that there are (at least) two primary obstacles for studying child language as part of language documentation efforts. Sometimes it may be because there are no children speaking the language. Other times it may be because researchers do not know how to even begin collecting such data. Eisenbeiss (2006) very clearly lays out how language researchers can go about doing this sort of research in the field with no language acquisition training or background. Naturally, this means that there will be a need for modified expectations of the research. Minimally, however, she argues, data should include spontaneous speech data, experimental data, and a staged communicative event such as songs or games or narratives.

In addition to the types of data required, Eisenbeiss (2006) suggests that in experimental studies within a modified version, the study needs to examine data from at least three children per age group for individual variation and this needs to be supplemented with chronological age-specific testing and a general measure of linguistic development. In English there are many such measures, some of which have fallen out of consistent use but which have been important in past research, for example, Mean Length Utterance (MLU), MacArthur-Bates Communicative Development Inventories (CDI), the Peabody Picture Vocabulary Test (PPVT). These are used for different things, but they are examples of tools employed for collecting supplementary data. While these may prove to be useful general measures their use requires the researcher to translate and calibrate them into the target language and ensure they are culturally
accessible within the community. Even across different dialects of a single language, such as the development of the MacArthur-Bates CDI into non-US Englishes (Dale and Penfold 2011, Fenson, Dale, Bates, Reznick, & Thal 1994) this has proven to be a mammoth task.

6. Challenges for best practice data collection & research

There are many challenges for researchers working in remote communities who might struggle to meet the sorts of expectations that would be required to achieve best practice in FLA research. This is not only with regard to the benchmark expectations discussed in §4, but even Eisenbeiss’s (2006) modified expectations. Some of the reasons that this might be the case include geographical, cultural, descriptive and endangerment issues, which we discuss below along with challenges on the basis of the size of communities speaking lesser-known languages in remote locations. While many of these challenges are experienced by all fieldworkers, whether their focus is child language research or otherwise, the higher expectations about sample size, replicability, regular frequent recording intervals and so forth (see §4) mean that these challenges have greater implications for FLA research, as we explain below.

6.1 Geographical challenges

Communities in which lesser-known languages are spoken can often be remote and therefore difficult to get to on a regular basis, and occasionally difficult to live in long-term due to a lack of housing. Even in countries like Australia, where it seems like it should be relatively easy, particularly for researchers from the nearby region, many researchers work in isolated communities which are cut off from main roads and therefore isolated much of the time. This makes it very difficult for frequency and regularity in data collection and the type of longitudinal sampling required for acquisition studies. It can be expensive, it can be very difficult to get to field sites, and even if there are multiple people that know a language, it can mean that it’s very difficult to have any sort of replicability of the research.
An extension of the notion of geographical challenges is potential economically-motivated concerns such as a lack of electricity. Researchers working in language description and documentation often work in communities where there is no electricity, or no regular, stable electricity. Such environments generally lack state-of-the-art facilities, resulting in unstable recordings with lots of signal and background noise which can be particularly difficult in child language recordings.

Underlying all these considerations is the economic reality that this kind of research relies on a large amount of funding which means that issues related to geographical constraints can be profound in terms of conducting child language research in remote communities.

6.2 Cultural differences

Cultural differences can also prove challenging for researchers, even those well-acquainted with the community of language users. Fieldworkers and language helpers often have mismatched expectations about work practices and how these will be carried out. Such cultural expectations have been the focus of several linguistic fieldwork guides (Newman and Ratliff 2001, Bowern 2008, Chelliah and de Reusse 2010), but even with extensive experience in a community cultural differences can be a challenge. From a developmental perspective, as seen in §2, cultural practices are foundational in children’s language development, and FLA research requires a solid understanding of these and how they may differ from familiar cultures.

A further factor that is often a challenge in remote communities is the extent of community literacy or whether the target language even has an established orthography. This means that it can be very difficult to undertake transcription and train assistants to develop the skills to assist in transcription. However, such helpers are crucial since children are difficult to understand even when adults share a target language, and transcription adds further complexity to the task of documenting language development. There are also problems with endangered languages (even those still with limited transmission) and limited descriptions of
these since we often do not have a comprehensive understanding of the target language.4

A further difficulty arises in contexts where the target language is endangered, and the community under pressure of language shift, since it can be difficult to pull apart the language behaviours that are developmental from those that are the outcome of the process of language shift. So this can be very difficult for researchers who are trying to both analyse the language, learn the language, and at the same time document language development. Alongside this researchers need to be mindful that adult users of a language may have a vested interest in which variety of the language is being examined and being transmitted. It can often be unclear whether the variety of the language that is considered in some way prestigious, either overt or covert, is the one that is being reported and documented. These are things that may not be known when going into a community, and although they are all general issues for linguistic field researchers, they can often confound the findings significantly in developmental work.

For researchers working with indigenous communities in Australia, cultural practices can often lead to population movement. A researcher may start working with children, lay out a plan with parents for a longitudinal study and then may return to a community in which the children reside and find them absent at that time. The families are interested and in some cases eager to participate but cultural practices and traditions dictate their movement in ways that may be in conflict with the needs of the research project.

6.3 Community size

Another prominent issue in communities speaking lesser-known languages is that communities are often very, very small. This can make it difficult to get adequate sample sizes that are needed for cross-linguistic comparative work. There is a

4 A reviewer asks why anyone would begin a documentation project without having a good knowledge of the target language. While we agree that it is not ideal (indeed, that is the point we are trying to make), it is hard to avoid when FLA research is undertaken on small languages since (i) language documentation efforts on the target language may still be underway; (ii) there are no language classes available in the target language so PhD students and other researchers have no option to learn the language before FLA research begins and are therefore in a position of having to learn the language themselves while conducting the FLA research.
small pool of possible candidates to study and a small pool of candidates to assist with data transcription.

7. How might we address these challenges?
For people working in language documentation and description the discussion above is not particularly new, nor elucidating. However, this discussion frames the following question: What can we do to address these sorts of issues? One possibility is for the field of first language acquisition to approach data from remote communities in different ways. Naturally, a best-practice model is ideal and is what researchers should be aiming for in their data collection. However, drawing on our own and our research teams’ experience in investigating the acquisition of Murrinhpatha, a traditional Australian language spoken in the Wadeye (Port Keats) area of the Daly River region in the Northern Territory, and Sherpa, a Tibeto-Burman language in the Nepal Himalaya, we still argue that there is value in modified datasets. We have found that even with data that do not fully comply with current best-practice data collection, such research may have the possibility to inform current models and theories of language acquisition. In particular such work serves to highlight typological similarities and differences and how these can play out in acquisition.

8. Future considerations
In this paper we have presented a brief survey of the typological diversity apparent in the major arenas for dissemination of findings in the field of FLA. We have shown that despite much promise in the 1970s and 1980s, the field today continues to build its theoretical and analytic assumptions on the basis of a small number of the world’s languages.

We suggest that with a broadening in the notion of what is considered good data we can open the field to a broader range of languages and language-learning contexts. Best practice in the field is important, however the ideal of adhering only to best-practice means the field risks rejecting the sorts of findings that were so crucial back in the 1970s in Ochs and Schieffelin’s groundbreaking work, as well as those of many other more recent scholars undertaking FLA research with
small and remote communities. Modified data sets are better than no data sets and minimal data still has the possibility to both inform and build upon our current models of acquisition. In doing so, it can also be valuable in contributions to general linguistic theories, while forming a basis for future work. The acceptance of modified data sets brings with it a recognition of the diversity of possibilities and challenges in data collection when studying languages spoken in remote communities, and a need for flexibility in data collection methods.

FLA research enables scholars to deeply investigate what sorts of potential universals, if they exist, are fundamental for language acquisition. In doing so, we can determine the sorts of things that we might see in both child-directed speech, in children’s language production, and in adult language. To achieve this, we need to be looking at the broadest possible range of languages. As Bowerman (2011: 616) argues, child language scholars “need to guard against parochial explanations of language acquisition” and be steered “toward theories that do justice to language diversity”. The study and dissemination of research into lesser-known, under-described languages with small communities goes some way toward this aim and should be encouraged now, while we have the opportunity and while such languages are still being transmitted.

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