

Language Documentation and Description

ISSN 2756-1224

This article appears in: *Language Documentation and Description*,
vol 15. Editors: Peter K. Austin & Lauren Gawne

Linguistic fieldwork: perception, preparation, and practice

TIMOTHY C. BRICKELL

Cite this article: Timothy C. Brickell (2018). Linguistic fieldwork: perception, preparation, and practice. In Peter K. Austin & Lauren Gawne (eds) *Language Documentation and Description*, vol 15. London: EL Publishing. pp. 179-207

Link to this article: <http://www.elpublishing.org/PID/165>

This electronic version first published: July 2018



This article is published under a Creative Commons License CC-BY-NC (Attribution-NonCommercial). The licence permits users to use, reproduce, disseminate or display the article provided that the author is attributed as the original creator and that the reuse is restricted to non-commercial purposes i.e. research or educational use. See <http://creativecommons.org/licenses/by-nc/4.0/>

EL Publishing

For more EL Publishing articles and services:

Website: <http://www.elpublishing.org>
Submissions: <http://www.elpublishing.org/submissions>

Linguistic fieldwork: perception, preparation, and practice

Timothy C Brickell

The University of Melbourne

Abstract

The challenging and multidisciplinary nature of documentary and descriptive linguistic fieldwork requires that linguists have a wide array of practical, interpersonal, and technological skills, in addition to theoretical and analytical linguistic knowledge. The negative outcomes which occur when fieldworkers lack requisite preparation include low-quality data (Nathan 2010, 2011:263), health problems (Newman 2009) or emotional distress (Macaulay 2004), and lack of involvement of speech community members in the documentation process (Chelliah & De Reuse 2011:163). This paper discusses academic perceptions and the difficulty of defining 'standard' fieldwork, the aims of contemporary language documentation and description in comparison to earlier traditions of descriptive linguistic fieldwork, training and preparation for postgraduate students, and problems which may result if training is insufficient. An examination of these issues does not provide much cause for optimism. While in public discourse linguists recognise a broad range of fieldwork experiences, outdated stereotypes still exist. Furthermore, despite some individual positive policies, overall, Australian universities lack robust specialised frameworks for fieldwork preparation, despite publications discussing the issue (Howell 1990; Macaulay 2004; Newman 2009). Increased awareness of the issues and improvements to existing policies are necessary in order to achieve best-practice approaches, resulting in more-capable fieldworkers, increased research output, and higher-quality, and more-enduring documentary data and analysis.

1. Introduction

The languages researched are often endangered, frequently spoken in developing countries, and commonly involve marginalised speech communities in isolated locations. Although not all fieldwork is conducted in this way, a common scenario for LD&D is that the linguist must travel to the primary speech community in order to work *in situ*.

Spending extended periods of time living and working in a foreign field site presents a range of challenges for the novice researcher. Some hardships

are common across locations, e.g. culture shock, possible (physical or mental) health issues, environmental challenges, boredom, isolation, and lack of privacy. Some difficulties vary across field sites, as they are affected by aspects of local or community politics and the socio-historical background of the speech community. In addition to networking and establishing relationships into the community, the fieldworker is ideally expected to collect, annotate, analyse, archive, and disseminate high-quality audio-visual and text data and metadata, all the while trying to ensure that their research benefits both the speech community as well as their own academic careers.

The technical skills needed for data collection, collation, management, and analysis are relatively straightforward, provided the proper training is given. In contrast, the task of preparing for the practical realities that fieldwork involves is more difficult and requires continuous discussion prior to, and during, the early stages of research projects. The consequences resulting from inadequate preparation are varied, and arise due to a lack of technical and analytical training, or from a lack of knowledge and planning for practical matters.

This paper¹ seeks to highlight the need for increased fieldworker preparation in practical and technological spheres. It is structured as follows: Section 2 examines definitions and academic perceptions of linguistic

¹ Special thanks must firstly go to all members of the Minahasan speech communities who have assisted me throughout the years, in particular: Leo Mamaris, Kalo Kojongian, Ester Mantiri, Fendy Parangkuan, Roy Nangin, Ros Nangin, M. Gigir, H.R. Paat, Jazar Mandey, Jenry Mandey, Albert Polii, Aby Malainkay, Ariel Pangau, and Jan Pelleng. Research conducted in North Sulawesi was initially supported by a La Trobe University Postgraduate Research Scholarship (LTUPS: 2011-2015) and a Disciplinary Research Program (DRP: 2016-1) grant. Subsequent funding was an Individual Postdoctoral Fellowship (IPF0246) from the Endangered Languages Documentation Programme (ELDP) at SOAS, University of London, and the Australian Research Council Centre of Excellence for the Dynamics of Language (CoEDL) Linkage program. An earlier version of this paper was presented at the second Documentary Linguistics Asian Perspectives conference (DLAP-2) at Hong Kong University in May 2017, and I thank the audience members for helpful comments. I am also grateful to Peter Austin and two anonymous reviewers for feedback on aspects of this paper; all remaining errors are mine alone. Lastly, I extend my thanks to the academics at Australian universities who were willing to discuss multiple aspects of fieldwork with me and to go on record. Their candid and informative answers to my informal survey allowed me to provide an overview of fieldwork training support at Australian universities, an overview which is not entirely complimentary.

fieldwork. An example is provided to demonstrate that, unfortunately, outdated and non-inclusive notions of fieldwork still exist within the contemporary linguistic academic community. Section 3 then defines LD&D in contrast to earlier traditions of descriptive linguistic fieldwork, before discussing the current standards of fieldwork preparation for postgraduate students at Australian universities. The final subsection then focuses on an ongoing problem which can be linked to incomplete training: the low quality of digital data which are found in online archives. In Section 4 my personal LD&D fieldwork experience is used as a case study relating to the matters discussed in Sections 1 to 3. Firstly, an overview of North Sulawesi as a field site exemplifies the difficulty of defining prototypical fieldwork. Secondly, aspects of my training and fieldwork techniques during two research projects are discussed, including creation of high-quality video materials which function as both a linguistic and ethnographic documentary record and a culturally-relevant elicitation stimulus for further data collection. The final section presents a summary of the preceding discussion, and puts forward a number of suggestions for possible improvements.

2. Linguistic fieldwork: definitions, academic perceptions, and the notion of ‘prototypical’ fieldwork

The practice of conducting fieldwork has been such an integral part of linguistic research that there has been minimal effort made to properly define it (Hyman 2001:15). Despite a long tradition which includes links with anthropology, missionary work, and European colonisation, the amount of literature dealing with the history and development of linguistic fieldwork is negligible, in comparison to disciplines such as anthropology or archaeology (Chelliah & De Reuse 2011:33). Also, even given the existence of this long tradition, it seems that linguists only vaguely agree on what constitutes ‘fieldwork’. While there is a degree of agreement that no one-size-fits-all category exists (Sakel & Everett 2012:3), beyond that the practice of fieldwork is still rather ill-defined.

In discussions of ‘prototypical’ fieldwork, the features of ‘distance, exoticism, and duration’ (Hyman 2001:16) are often presented as fundamental (Chelliah & De Reuse 2011:3; Hyman 2001; Sakel & Everett 2012:3). Defining fieldwork using these broad descriptions allows for many different experiences to be included, but it also creates a fundamental problem in that any research work in a fieldworker’s own country or community is excluded. The contrast between prototypical, or ‘dirty feet’ (Crowley 2007:11-13) fieldwork, and the less-exotic ‘armchair’ (Aikhenvald 2007:4) or

‘urban’² fieldwork is well-known, yet rarely discussed in linguistic literature (Chelliah & De Reuse 2011:3).

Any fieldwork model based around the triad of distance, exoticism, and duration has additional problems. Foremost among these is the idea that fieldwork experiences are inherent to the identity of a researcher and that fieldworkers and their fieldwork must therefore conform to various stereotypes (Bowern 2008:13). The most common fieldwork trope has been ‘nine months spent in a mud hut in a remote location, ideally without power and running water, accompanied by pain and suffering’ (Austin 2007a). As for the fieldworker, enduring myths are the rugged ‘Indiana Jones’ type³ or the heroic white saviour (Bowern 2008:13). Fortunately, these myths are not as pervasive as they once were and are unlikely to be found in formal discourse. Nonetheless, informally at least there are those who still cling to the mud-hut ideal as exemplified by the following social media comment from Everett 2016 (my emphasis added):

I am a fan of quant[itative] research. And it needs to replace a lot of data collection and analytical methods bequeathed by some theories. Still descriptive methodology and analytical techniques have never been surpassed and everyone should learn them. **Ultimately a linguist is someone who can walk into a jungle, find a [language] – no language in common! – and figure it all out with a spiral notebook and a Bic pen.**

This comment stimulated debate online and also during a regular informal meeting of linguists in London⁴ in October 2016. While a number of the online contributions were critical of this overly-restrictive definition of fieldwork, others were more sympathetic. The author’s defence of the original post was built around a perceived requirement for all linguistic research to occur *in situ* due to the strong link between language and culture. An additional point, ostensibly, was that an over-reliance on technology may cause linguists to be less skilled than they ideally should be.

² This may encompass work with heritage language speakers, speakers of languages which the researcher may be also be a speaker or semi-speaker of, or speakers of minority languages from migrant communities in urban centres. An example of this final category would be research carried out by the Endangered Languages Alliance in New York City (www.elalliance.org, accessed 2018-06-10).

³ In the Australian academic context this stereotype has been labelled as ‘Crocodile Dundee Fieldwork Model’ (Austin 2007a) after the caricature of Australian masculinity displayed in the 1980’s movies starring Paul Hogan, *Crocodile Dundee* and *Crocodile Dundee 2*.

⁴ Linguistics In the Pub In London (LIPIL): rnl.org/LIPIL.

In its entirety this comment is certainly relevant to linguistic fieldwork. But the idea that this type of research must only occur via monolingual immersion with minimal technology is, at best, overly simplistic and disingenuous. It is of course indisputable that long-term, monolingual fieldwork within speech communities is often highly effective. But this restrictive conception completely disregards research conducted in any other situations. It also overlooks the reality that circumstances make the long-term, monolingual method impractical for some linguists. Not all researchers can, for instance, spend months continuously conducting fieldwork overseas due to various personal, professional, or financial obligations in their home country. Furthermore, it is not always possible for linguistic research to be conducted exclusively in the target language. In communities where language shift is well advanced, fieldworkers are often required to have working knowledge of the local *lingua franca*.

A more-concerning characteristic of the Everett viewpoint is that it is fundamentally exclusionary. A restrictive definition which allows only researchers using one particular method to be labelled as a 'linguist' is unhelpful for the discipline of LD&D and dismissive of the many linguists who never embark on fieldwork. It also risks feeding into the idea that data procured at some personal risk are somehow more worthwhile (Passaro 1997:147), or more 'pure'. A final problem is that the focus is entirely on the fieldworker. Indigenous speech community members, meanwhile, are essentially peripheral figures in the documentary, descriptive, and revitalisation process (Lauren Gawne pers. comm.).

It would be easy to dismiss the Everett position as part of the outdated views of a small minority of scholars. However, linguist colleagues report that these views are not as uncommon as might be expected. These non-inclusive definitions of fieldwork are not simply dated, they could have a negative effect on prospective junior researchers, either because they feel uncomfortable with the concept of obligatory personal hardships during research or because they feel unable to measure up to the inherently-macho criteria required for the mud-hut method. Considering the now well-known dire levels of linguistic vitality of the world's languages, there is a significant need to attract more junior scholars to conduct linguistic fieldwork. To this end a more flexible and inclusive definition of fieldwork is required, rather than one which necessitates personal trauma if it is to be considered valid. The criteria for identifying research best-practices involving fieldwork must relate to rigorous and high standards of data collection and analysis, rather than the technologies used, locations travelled to, or difficulties encountered while obtaining it.

3. LD&D and contemporary fieldwork

3.1 LD&D in contrast to descriptive linguistic fieldwork

Contemporary linguistic fieldwork conducted within LD&D projects diverges somewhat from earlier traditions of fieldwork, in which the primary aim was grammatical description of the language under investigation. The separation of what has traditionally been labelled as ‘descriptive linguistics’ into two separate, but overlapping, disciplines is primarily the result of the relatively recent emergence of documentary linguistics as a field of study in its own right (Austin & Sallabank 2011:12). Documentary linguistics as a separate field has been justified on a number of grounds. The worldwide problem of language endangerment and loss is a fundamental reason (Himmelman 2006:1; Austin & Sallabank 2011:12), but there is also a commonly accepted notion that much of the work undertaken under the traditional label of descriptive linguistic research in practice comprises two sorts of activities. One, labelled as ‘documentary’, centres around the collection of data, its representation and management, and its diffusion (Austin 2006:87). Documentary linguistics separates these activities from those which relate to the analysis and description of lexical, phonological, and morphosyntactic aspects of a language as a linguistic system (Himmelman 1998:190, 2002:1-2).

To clarify further, language documentation has been described as the collection, annotation (transcription and translation), preservation, and dissemination of primary linguistic data (Himmelman 1998:190, 2002:1-2; Woodbury 2011:159). The linguistic records created by language documentation are ideally long-lasting and multi-purpose (Himmelman 2006:1), with a large intended audience, including non-academics and members of the speech community whose language and culture are the subject of research (Austin 2006:87). The possibilities for wider dissemination of these records, as well as their preservation through archiving, has been enabled by rapid advances in digital audio-visual and storage technologies, and supporting software.

Language description, in contrast, relates to what are seen as the core activities of the discipline of descriptive linguistics, that is, the analysis of data to produce a grammar-dictionary-text collection triad (Himmelman 2002:2), in the Boas-Sapir-Bloomfield tradition (Evans & Dench 2006:10-16). Unlike documentation, research output from language description has a much more limited audience, usually restricted to other linguists or academics. In addition, it may or may not be long-lasting, depending upon the theoretical framework utilised.

3.2 Training and preparation policies for LD&D fieldwork

It is reasonable to assume that linguistic fieldwork now undertaken by postgraduate students is expected to include, to varying degrees, the multiple activities subsumed under the label LD&D. In order to successfully undertake them a broad range of skills is needed. The ideal skill-set includes elements of practical, personal, analytical, and technological expertise. The remainder of this section argues that, in the Australian academic context at least, novice fieldworkers are rarely provided with all the required skills, despite the best efforts of supervisors.

The suggestion that training and preparation for first-time fieldworkers is inadequate is not new. A number of publications have addressed this issue, either specifically (Macaulay 2004; Newmann 2009:114-115; Rehg 2007:13-15) or as part of broader discussions on LD&D (Bower 2008:11; Nathan 2010; Austin & Sallabank 2011:20-1). Personal conversations with linguist colleagues have led me to the opinion that first-time fieldworkers in the Australian university system often lack sufficient formal training. In order to test this, I conducted an informal survey of linguistics departments at eight Australian universities, all of which offer undergraduate linguistics programmes in addition to postgraduate research programmes with a potential for fieldwork. The first question asked was ‘Does the institution offer an ongoing field methods unit or is training provided on an ad-hoc basis?’ Table 3.1 displays the results.⁵

⁵ * denotes field methods units offered once every two years, ** denotes field methods units were previously offered but have been discontinued; MON expects to introduce a broad-ranging ‘fieldwork preparation module’ (Alice Gaby: pers. comm.) in the near future.

University	Contact	Field methods training	Ad-hoc training
The University of Melbourne (UoM)	Assoc. Prof. Nicholas Thieberger	Yes*	Yes
Australian National University (ANU)	Prof. Jane Simpson	Yes*	Yes
University of Sydney (UoS)	Prof. Nicholas Enfield	Yes*	Yes
La Trobe University (LTU)	Dr Stephen Morey	No	Yes
University of Newcastle (UoN)	Dr William Palmer	No	Yes
Monash University (MON)	Dr Alice Gaby	No	Yes
University of Queensland (UQ)	Dr Felicity Meakins	No**	Yes
University of Adelaide (UoA)	Dr Robert Amery	No**	Yes

Table 3.1: Field methods training offered by eight Australian universities

The benefits of training novice fieldworkers to use appropriate equipment, software, data management, and metadata techniques are obvious. This type of training should, in my opinion, be a compulsory part of any postgraduate research program with extensive fieldwork components. At the very least an increase in this type of training would alleviate problems associated with archived data quality (see §3.3). However, even if this training is offered, the work undertaken during it will always differ from that which goes on in the field, as it lacks the relevant social, cultural, and environmental context of the field site. Furthermore, field methods units are unlikely to assist with obtaining the practical ‘field skills’ (Rehg 2007:15) which allow fieldworkers to maintain their health, happiness, and emotional stability in the field. Culture shock and social disorientation commonly experienced during fieldwork cannot be mitigated by this type of training.

Acceptance that there are always difficult practicalities inherent to fieldwork should not make them obligatory or defining – such a view leads towards the Everett and mud-hut definitions mentioned above. It must not be forgotten, however, that fieldwork *can* be dangerous, a point which seems to be accepted but is rarely overtly mentioned. Various physical dangers may occur during fieldwork, including sickness or disease, insect stings, animal bites, vehicle accidents, robbery, and physical or sexual assault (Howell 1990; Newman 2009:115). Less-tangible problems are also not uncommon, and include loneliness, culture shock, frustration at lack of progress, fear of failure, anxiety, and alcohol or drug abuse (Bower 2008:143; Howell 1990).

Problems of this sort are not confined to fieldwork, of course, but the fundamental difference is that novice fieldworkers lack their usual support networks and may also lack access to emergency services support.

Arguably, linguists now accept that fieldwork includes some degree of physical or psychological hardship (Newman & Ratliff 2001:7), especially in the early stages. In spite of this, there still appears to be minimal formal discussion of the topic, apart from occasional comments in fieldwork manuals or related publications. Individual linguists or department heads may occasionally initiate some form of discourse on this topic, but this does not appear to translate into robust policy frameworks for examining and identifying potential problems. In my opinion there is an ethical responsibility on the part of universities to ensure that first-time fieldworkers are as aware as possible of the practical challenges of their particular field site. The most direct way to achieve this would be to include some sort of detailed discussion and assessment of potential issues prior to fieldwork, possibly in the course of the postgraduate application process. The second survey question put to linguists at the eight Australian universities was directed at this: 'Is there any formal assessment of applicant suitability for, or discussion of, fieldwork challenges during the postgraduate application process?'. Table 3.2 presents the results.

University:	Contact:	Assessment:	
		Formal:	Ad-hoc:
The University of Melbourne (UoM)	Assoc. Prof. Nicholas Thieberger	Yes	Yes
University of Queensland (UQ)	Dr Felicity Meakins	Yes	Yes
La Trobe University (LTU)	Dr Stephen Morey	No	Yes
Australian National University (ANU)	Prof. Jane Simpson	No	Yes
Monash University (MON)	Dr Alice Gaby	No	Yes
University of Sydney (UoS)	Prof. Nicholas Enfield	No	Yes
University of Newcastle (UoN)	Dr William Palmer	No	Yes
University of Adelaide (UoA)	Dr Robert Amery	No	Yes

Table 3.2: Formal assessment or discussion with postgraduate applicants during application process.

With two exceptions, these results demonstrate a lack of formal processes for discussing practical challenges or candidate suitability prior to commencement of candidature. The linguists I corresponded with stressed that supervisors will always seek to engage with students to discuss issues prior to the commencement of any fieldwork. In four of the eight universities this is undertaken to some degree with briefings before or after fieldtrips. While I have no doubt that supervisors sincerely intend to offer support, the fact remains that supervisory duties are just one of many responsibilities academics must juggle. When this responsibility is placed solely on supervisors instead of being part of a departmental or faculty-level process, there is the distinct possibility it may not always be given the priority it deserves, given numerous other employment obligations. Taken together, the results presented in Tables 3.1 and 3.2 demonstrate that Australian university linguistics departments rely on ad-hoc technical training and practical preparation, and that Australian postgraduate students therefore typically commence fieldwork projects with less knowledge and training than is ideal.

Despite a lack of formal discussion in the application process, all Australian universities implement explicit administrative requirements relating to postgraduate students' safety while overseas. These are found in the various categories of paperwork which are required for insurance and Occupational Health and Safety (OH&S) before fieldwork begins. However, there are fundamental problems related to relevance and detail with bureaucratic processes as a form of practical preparation. In my experience, and in discussions with other linguists, it seems that the information required for obligatory risk assessment is typically broad-ranging but vague, and rarely tailored in any way to linguistic or anthropological fieldwork. Questions about topics such as crime and security are included, however these often only require a 'yes/no' response and have minimal space for any further detail. The topic of relationships with local communities is only briefly referred to in the form of questions such as 'Are you familiar with local laws and culture?' or 'Do you speak local languages?'. The same problem is also evident in the university ethics clearance processes that all Australian postgraduate students must complete prior to commencing data collection involving human subjects. Although the forms and submission procedures may vary, they are commonly derived from medical research. I have observed this first hand. In the two sets of ethics procedures I have completed, there were questions related to the collection of human foetal tissue or embryos. The lack of relevant questions, or the inclusion of questions that, one would assume, are irrelevant to linguistic fieldwork, risks making administrative preparation less effective at identifying potential fieldwork challenges than it should be.

3.3 Issues arising from insufficient training

If novice fieldworkers are unprepared there are an assortment of potential negative outcomes, from unhappy fieldwork experiences leading to unfulfilled research goals to physical or psychological trauma. Such results of fieldwork were described to me during personal correspondence with other linguists, and I strongly suspect that they are not infrequent at Australian universities. Less-tangible problems of emotional or psychological injury are more difficult to quantify. While highly relevant to training and preparation of postgraduate students,⁶ they are beyond the scope of this paper and will not be examined here (but see Stebbins 2003:272-274; Macaulay 2004). In contrast, a more-definable and short-term result of unproductive or traumatic fieldwork is a lack of research output or the discontinuation of postgraduate study. Also in terms of research outputs, a current and easily-observable example of what happens when fieldworkers are inadequately trained can be seen in the quality of digital data deposited in archives.

Linguists are now able to deposit in archives large amounts of data and analysis collected during LD&D projects as a result of rapid developments in digital technologies. Together with portable and relatively inexpensive equipment, these now provide incredible opportunities for richer, multidimensional, and more easily accessible documentations for archiving and dissemination. Video has become increasingly relevant to language documentation (Austin 2007b:27; Seifart 2012:1) because of its utility in capturing aspects such as turn-taking, gesture, facial expressions, eye gaze and lip movement (Nathan 2011:269; Margetts & Margetts 2012:32). However, its ease of creation also raises questions of quantity versus quality, and to its value if not utilised effectively. The problem of large amounts of low-quality archived digital material has been highlighted by Austin (2012b), who warns against 'data dumps', whereby linguists deposit numerous recordings with minimal metadata and annotation. In addition, the low value of video recordings when equipment is not utilised properly is an issue raised, indirectly, in Margetts & Margetts (2012), and more specifically with relation to production quality of documentary records and elicitation material in Jukes (2011).

I carried out an examination of video data in 20 corpora deposited between 2007 and 2017 in *The Endangered Languages Archive* (ELAR) and *The Pacific and Regional Archive for Digital Sources in Endangered Cultures*

⁶ It must be noted that students who undertake fieldwork for the first time are close to the higher end of the age demographic (16-24 years) which has one of the highest rates (26%) of mental health issues in Australia (Australian Bureau of Statistics 2007).

(PARADESIC). The results of my survey paint a rather depressing picture, especially for recordings which are ostensibly meant to document dynamic, culturally-relevant activities. The currently accepted norm for video made by linguists appears to be either speakers sitting immobile while talking (what Jukes (2011: 50) calls ‘sit and talk’), or shaky hand-held footage as people move about describing activities or pointing out objects while being followed by researchers (called ‘point and show’ by Jukes (2011: 50)). In the latter category there is often little or no attempt to control the filming environment or to use appropriate settings on recording equipment. Instead, the process has simply been to start recording, intermittently use the zoom function at high speed, stop recording after a period of time, and then upload the recording to an archive without further amendment. Because the recordings are not edited the events being filmed appear incomplete as they lack any sense of a defined beginning, middle, and end. Even videos in the static-sitting-speakers category show problems relating to basic techniques of equipment placement, e.g. with microphones or body parts obscuring speakers’ faces. An additional and disappointing pattern observed in this examination was that, while the resolution of videos improves markedly over the ten years, production quality does not.

Low-quality and minimally-annotated digital materials are not difficult to find in archives and seem to be accepted in LD&D. Fieldworkers are not entirely at fault here as the incompetent use of technology is in every likelihood a result of ineffective training. Unfortunately, the resulting materials are unlikely to be useful for further research or dissemination, or to provide an accurate documentary record of the language and culture. In the context of best-practice LD&D they are of limited future use, thereby defeating a fundamental aim of digital archiving, namely preservation. Furthermore, the potential for data dumps is exacerbated not just by the ease of obtaining poor video footage and the lack of training, but also by the real or perceived need to obtain as much material as possible during fieldwork. While a ‘record-everything’ approach is understandable for work on highly endangered languages, an unintended consequence is that researchers may end up with more raw data than they can ever properly process.

4. Fieldwork experience in North Sulawesi

My personal experience of conducting LD&D fieldwork consists of spending approximately seventeen months over the last seven years in the *Minahasa* and *Minahasa Tenggara* ‘Southeast Minahasa’ districts in the province of North Sulawesi, Indonesia. During this time, eleven months were spent in the *Tondano* (ISO 639-3:TDN) speech community undertaking a PhD between 2011-2015, with an additional six months fieldwork part of a post-doctoral fellowship beginning in September 2016 which aims to document the

Tonsawang (ISO 639-3:TNW) language. The following subsections describe various aspects of these fieldwork experiences. Firstly, I present an overview of North Sulawesi as a fieldwork destination to further demonstrate the difficulty of defining fieldwork as per the prototype outlined in Section 2. Secondly, in Section 4.2 I outline my own postgraduate training and preparation and mention a number of practical and technological issues I encountered during initial field trips. In Section 4.3 I discuss attempts to utilise video technology to produce high-quality, multi-purpose documentary data.

4.1 Minahasa and Minahasa Tenggara: prototypical field sites?

Under the broad definition presented earlier, my Minahasan fieldwork experience is certainly prototypical. Conducting research on the endangered⁷ Tondano and *Tonsawang* languages has required extended periods of data collection and analysis at multiple locations in a developing country with very different cultural norms to my own. The indigenous speech communities for these two languages reside in a number of villages and small towns in two districts in the northern tip of the island of Sulawesi, Indonesia.

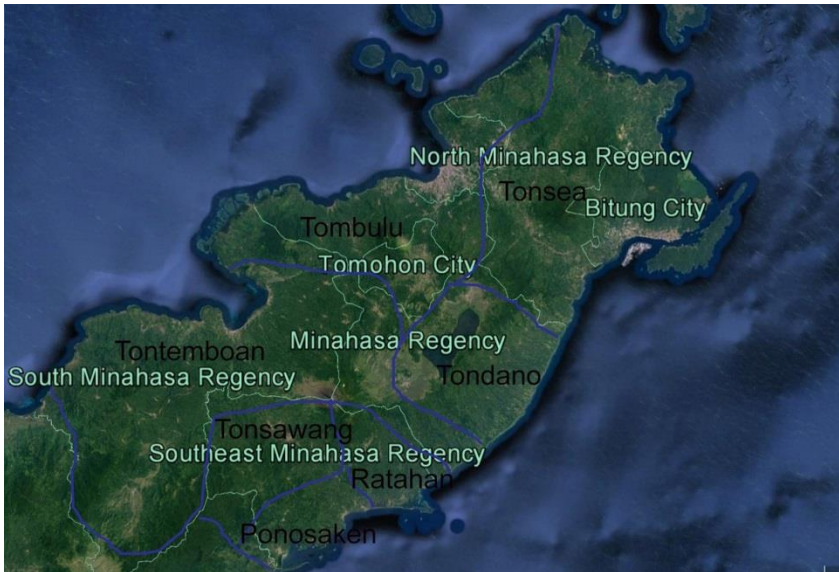
Map 1 shows the island of Sulawesi within the Indonesian archipelago. Map 2 displays the approximate geographic locations of a number of ethnic and linguistic groups in North Sulawesi.⁸

⁷ All Minahasan languages are endangered and levels of linguistic vitality are low. Language shift to a Malay-based creole (*bahasa Manado*: ISO 639-3:XMM) is well advanced and intergenerational transmission has almost completely ceased (Merrifield & Salea 1996; Wolff 2010:299; Mead 2013; Brickell 2015).

⁸ Map 2 illustrates that the *Tonsawang* speech area is bordered by Tontemboan to the North and West, *Ponosakan* to the South and *Ratahan (Torátan)* to the East. There are ten languages spoken in North Sulawesi, including Manado Malay. Five of these languages comprise the Minahasan microgroup (Sneddon 1970:14; 1978:8), three (*Ratahan*, *Bantik* and *Sangir*) belong to the Sangiric microgroup, and *Ponosakan* belongs to the Gorontalo-Mongondow microgroup. All three microgroups are considered part of the Philippine or Greater Central Philippine subgroups of the Malayo-Polynesian branch of the Austronesian family (Blust 1980, 1991, 2012:82; Ross 1995; Zorc 1986).



Map 1: The island of Sulawesi in western Indonesia (Google Maps 2018)



Map 2: Traditional boundaries of North Sulawesi language and ethnic groups (Google Maps based on Henley 1993:95).

Although fieldwork in North Sulawesi entails distance, exoticism, and duration, it differs from what might be expected of a field site in a developing country. The overwhelming prevalence of Christianity in the region and a very pro-western outlook have tangible effects on how western fieldworkers are perceived and treated. The historical events of colonisation and conversion to organised religion which often cause social upheaval and the marginalisation of indigenous communities are almost universally viewed by people in the area as positive, so much so that they are judged as unifying factors central to contemporary Minahasan identity (Jacobson 2002:41; Kray 2006:19-20). As a result, westerners are frequently judged favourably from the outset as they are seen to be fellow practising Christians. Fieldworkers therefore can have fewer concerns about bringing negative historical or colonial baggage to the region. They rarely have to overcome negative stereotypes due to past mistreatment of indigenous people by outsiders, as is the case in some other fieldwork situations (Bower 2008:164).⁹ Moreover, in terms of physical safety, there are almost no dangers to foreign researchers aside from traffic accidents. Anecdotally, crime rates appear low, especially outside of the larger cities. Petty crime in villages is almost non-existent and I have never heard of instances of theft nor seen acts of violence. From my time in the two districts the experiences of robbery or mugging which I have heard about from other linguists are unimaginable. And while corruption in the region is certainly a problem (as it is all over Indonesia), for fieldworkers it is rarely encountered, and confined to occasional dealings with immigration agents or police.

A number of other socio-cultural features in the region distinguish it from what might be expected, for example, in an Australian or North American context. The indigenous speech communities have avoided ongoing marginalisation, as indigenous Minahasans currently make up the largest proportion of the overall population and experience no systemic ethnic-based discrimination. Levels of infrastructure and urbanisation are also arguably different from other locations in Indonesia or Southeast Asia, being of a relatively high standard for a developing country; road infrastructure is commonly respectable, electricity is intermittent but widespread, mobile phone reception is accessible in most areas, and wireless internet for 3G and 4G networks is available in urban areas.

Examined together, the features of these field sites in North Sulawesi suggest that defining a fieldwork prototype is highly problematic. They debunk the view that there is only one type of fieldwork: one in which all field

⁹ North Sulawesi is not the only province in Indonesia where such attitudes are attested; see, e.g. Gasser (2017:519-20) on fieldwork in Manokwari, West Papua.

sites must be remote, underdeveloped, and dangerous, where the experience is solely defined by potential hardships that must be endured.

4.2 Fieldwork training and preparation

Overall, my experience of training and preparation for fieldwork suffered from the issues outlined in Section 2, in that it was, unfortunately, minimal and ad-hoc. A taught field methods unit was not available as part of my PhD candidature. Instead, I attended introductory training sessions for software programs such as ELAN, FLEx, WeSay, and SayMore which were offered occasionally at various universities around Melbourne. Training in the use of audio and video equipment was not offered, and I was instead restricted to reading manuals, seeking information online and from colleagues, and informally testing equipment. Other preparation including reading previous anthropological studies of the Minahasa region, as well as publications relating to fieldwork, e.g. Samarin (1976), Abbi (2001), Newman & Ratliff (2001), Bownern (2008), Chelliah & De Reuse (2011), and Sakel & Everett (2012). Additional advice was sought from senior members within the PhD programme at La Trobe University – informally with the department head and my potential supervisor prior to commencement, and also as part of the obligatory and extremely useful pre-fieldwork and post-fieldwork briefing sessions.¹⁰ The only other practical preparation was one undergraduate unit of the national language of Indonesia, *Bahasa Indonesia* (ISO 639-3:IND).

For the novice, the length of time needed to prepare for initial fieldwork will depend to some degree upon the specifics of the field site. In one fieldwork manual the required length of time for preparation is estimated to be up to one year (Bownern 2008:129). In my case, the time available for official preparation was limited to three months from the beginning of my PhD candidature. While this was less than ideal, I was somewhat fortunate, however, as the practicalities which needed to be completed were minimal; obtaining a two month extendible Indonesian socio-cultural visa was straightforward and inexpensive, and the required vaccinations were easily available. In addition, the process of obtaining funding and ethics clearance for the project had begun prior to commencement and was completed within the first two months. Accommodation with a host family had already been organised, as had the

¹⁰ The pre-fieldwork and post-fieldwork briefings were discontinued during my PhD candidature at LTU. This appears to be have been an unintended result of School and Faculty level restructuring.

assistance of a local community member in a ‘fixer’ role. The only administrative difficulty, which caused a slight delay in the initial stages, lay in carrying out risk assessment and obtaining the required travel insurance from the university.¹¹

My initial field trips were somewhat bewildering at times. Although networks were created and usable linguistic data were collected, a number of common issues occurred (Newman & Ratliff 2001:8; De Reuse & Chelliah 2011:118). For example, I had difficulty explaining research aims and expressing myself in both the language of wider communication (Manado Malay) and the language being researched, difficulty finding speech community members to assist, confusion regarding the necessity and suitable level of remuneration, culture shock, lack of independence, lack of privacy, boredom, and homesickness. These challenges meant that, initially, progress was slow with the important goals of creating a suitable work routine, finding the correct balance of work time and personal time, and locating suitable speech community members to collaborate with.

Being ill-prepared for fieldwork also had an adverse impact on the effectiveness of my initial data collection procedures. A lack of any proper audio or video recording experience was obvious in hindsight. Technically, this resulted in simple mistakes relating to microphone placement, correct monitoring of input levels, and awareness of environmental acoustics and background noise at the locations chosen for recording sessions. While some equipment was available for incorporating digital video into sessions, my minimal training and experience meant this was not utilised as efficiently as it might have been. On a more practical level, recording sessions felt chaotic as I struggled with organisation in what was, for all involved, a slightly awkward and unusual situation. It was a constant challenge to make participants feel at ease. Even more difficult was attempting to control the numerous interested neighbours and friends who

¹¹ The risk assessment was affected by the decision of the Australian government’s Department of Foreign Affairs and Trade (DFAT) to change the advice level for the entire Indonesian archipelago to the second highest warning rating of ‘Reconsider your need to travel’ in May 2011. This change was primarily in response to events in Jakarta, 3,300 km from my field site, even though North Sulawesi has never experienced a terrorist event or any ongoing sectarian violence, including during the period of civil unrest which gripped central and southern Sulawesi, Kalimantan, and Maluku in the late 1990s and early 2000s. This adverse risk assessment was overcome by attending multiple meetings with university management together with my PhD supervisor who explained the extremely low threat of physical danger in North Sulawesi.

would unintentionally disrupt recordings sessions while trying to ‘assist’, a not uncommon problem (Abbi 2001:86). And other things, which now seem so obvious, were not considered early on, such as ensuring that I was not the only person in the room with a participant during a monologue recording, thereby avoiding the speaker narrating a story to someone who could barely understand a single word of what was being said.

Although disheartening at times, the technical, practical, and personal problems which occurred as part of these first field trips were overcome through a combination of practice, time, and increased knowledge of community and cultural norms. The question I have often asked myself is: ‘to what degree were these problems avoidable through increased training and practical preparation and to what degree they must be considered as a necessary part of fieldwork?’ I am of the opinion that a taught field methods course would have assisted me greatly and would have improved my organisational, data collection, data management and metadata techniques during initial recording sessions. In contrast, the practical and personal issues caused by my lack of field skills are much more difficult to avoid, even with formalised training. Despite this, the conversations which I had on these matters with senior linguists, both informally prior to commencement of candidature and formally as part of pre-fieldwork and post-fieldwork briefings, were extremely beneficial. All pre-departure sessions were informative and provided a credible idea on what could be expected during fieldwork. They also allowed for more-experienced fieldworkers to evaluate, as much as is possible, how I might fare. Moreover, the post-fieldwork briefings then allowed me to discuss specific problems I had encountered and to consider possible solutions.

The various discussions I undertook during my PhD candidature could not mitigate the issues I encountered during the early stages of fieldwork; this is an unrealistic expectation. It does not mean, however, that they were not worthwhile. In particular, what these face-to-face conversations did achieve, in a way that field manuals could not, was to make the experience of dealing with the challenges feel more manageable, and to assist in making me, the first-time fieldworker, feel less like I was the only researcher experiencing them.

4.3 Documentation in practice: video production in the Tondano and Tonsawang communities

During my PhD candidature I made various attempts to utilise video technology. Most audio recording sessions were filmed and the resulting video data were useful for capturing lip movement, gestures, eye gaze and turn-taking. Unfortunately, these videos occasionally suffered from the problems discussed in Section 3.3 above. Furthermore, attempts to produce

higher-quality recordings to detail traditional Minahasan culture were unsuccessful. These recordings were intended to be procedural narratives (Jukes 2011:55; Yamada 2007:263) in which speakers are filmed cooking a traditional dish or harvesting a cash crop while narrating the process involved. Lack of training and correct equipment were the primary obstacles, but insufficient planning also made the processes difficult and unnatural for the elderly speakers I worked with.

I also endeavoured, unsuccessfully, to use some of the most common elicitation materials available online, including the *The Pear Film* (Chafe 1980) and *Cut and Break* video stimuli (Bohnemeyer et.al. 2001). While there is no doubt that these are helpful tools which can be utilised effectively in certain situations, they are extremely Western-centric in the settings and the protagonists portrayed in them. Their lack of relevant cultural context makes their effectiveness debatable in non-Western countries – a problem also related to me by other linguists. In my experience, elderly speakers either struggled to make sense of what activities were supposed to be occurring, particularly in the *Pear Film*, or were more inclined to focus on the Western setting and actors, rather than any of the events taking place. During this period, the only videos which I successfully used for elicitation were two specifically prepared by my supervisor. These demonstrated activities the speakers were familiar with: collecting palm sugar sap, and collecting and cooking sago grubs.

One aim of my current Tonsawang project is to produce short (< 30 minute) videos which accurately document cultural and ethnographic activities and which can also be used as elicitation stimuli. These films are intended to meet the ideal standards for documentary linguistic data outlined in Section 3.1, as well as to address the quality issues outlined in Section 3.3. An additional important aim is to use the video production activity to include speech community members in the documentation process – an important yet traditionally overlooked aspect to fieldwork (Cameron et. al.1992; Yamada 2007). Regarding archiving and distribution, these films are currently being open-access archived at the ELAR repository at the University of London¹² and uploaded to video sharing sites such as Youtube¹³ and Vimeo.

¹² elar.soas.ac.uk/Collection/MPI1035088 (accessed 2018-06-19)

¹³ [youtube.com/channel/UC0bQQEdQAm9uBKSeJSksWZw/videos](https://www.youtube.com/channel/UC0bQQEdQAm9uBKSeJSksWZw/videos) (accessed 2018-06-19)

In order to produce higher-quality video content, the minimum technical requirements were identified as follows: suitable equipment,¹⁴ a minimum amount of training in videography, and basic knowledge of a video-editing suite. A small amount of formal grantee training was provided via The Endangered Languages Documentation Programme at SOAS, University of London. The remainder of the training leading into this project was ad-hoc and augmented by hands-on experience. Basic videography training was undertaken during two informal sessions with a professional documentary film maker who is a personal friend. This included: choices for lightweight and suitable equipment, using multiple cameras to increase production values, location and lighting issues, optimum recording settings, and hints and tips for using video-editing software.

The process of producing these films has involved, in part, a steep learning curve. The results so far, however, have been positive and have met the desired goals. The current batch of short films (depicting preparation of four traditional recipes and five cash crop activities) demonstrate high-quality video which has been edited to a respectable standard and which incorporates audio narration and subtitles in two endangered languages. They function as a documentary record of culturally and economically relevant activities which are instantly recognizable to community members. They also function extremely well as elicitation tools in that multiple elderly speakers have had no trouble narrating them. The production processes have functioned well as a collaborative endeavour entailing an exchange of knowledge between all parties involved. The local people teach me about the steps involved and assist with practical requirements during production. In return, I provide training in documentary filming procedures and distribute the finished products within the community.

A range of stages comprising pre-filming and post-filming activities are necessary to produce these short films. Table 4.1 outlines the workflow.

¹⁴ Two Canon camcorders were chosen; the HF R606 and HF R706. These are compact and portable (235 grams and 58mm x 116mm x 53mm), record in 1920 x 1080 HD at a maximum of 50 Mbps, allow SD cards of up to 64GB, and have sufficient battery life. Two tripods were also purchased, a less-expensive Manfrotto compact advanced 3-way head and a higher-quality Manfrotto HDV-755XBK system. A licence for the Premier Pro CC editing suite was purchased for video editing. The total outlay was a relatively modest AUD \$1,379 (USD \$1,080, EUR €916).

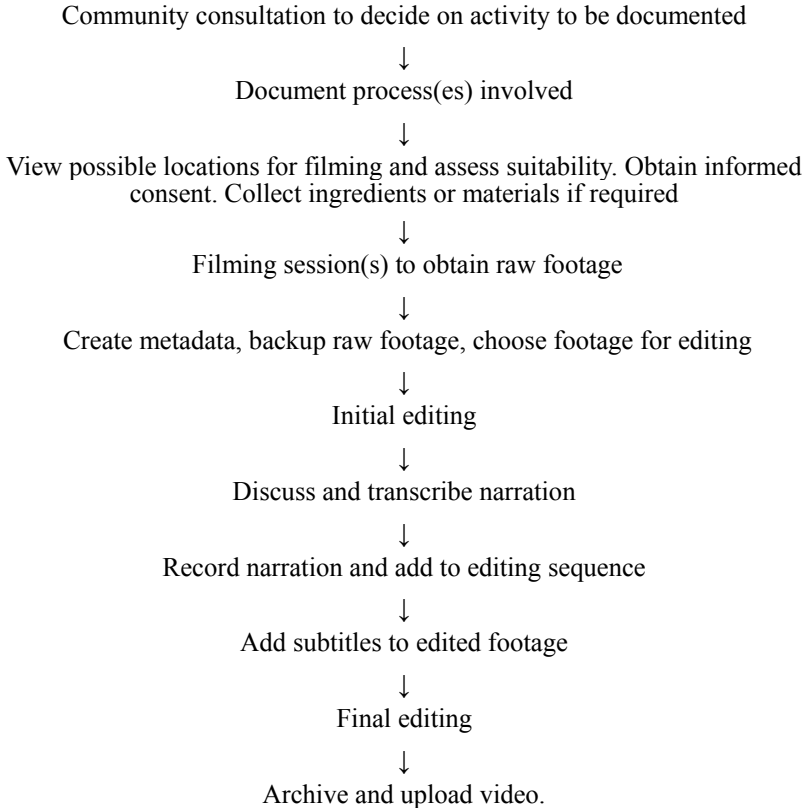


Table 4.1: Workflow for documentary video production

The completion of all the pre-filming steps represents a best-practice method of organisation which may not always be possible. Experience has taught me that a greater amount of planning usually results in a more successful filming session. If, for instance, the three pre-filming stages are not completed effectively, then parts of the process may be absent from the raw footage. If these are to be included then more time and additional filming is required.

Following the shooting of raw footage, the post-filming stages are the most laborious of the entire process. These involve use of the Adobe Premier Pro CC suite to cut and combine video segments into a coherent sequence, add appropriate transitions between each segment, amend any colour or lighting issues in segments, and create and add opening titles and end credits. Following this, audio narration and subtitles are recorded and added before the finished video is exported and uploaded.

There have been a number of minor practical and technical challenges during the pre-filming and post-filming stages. On the practical side, the weather and filming in outdoor locations can be problematic due to conditions ranging from tropical rain storms and rough and uneven terrain to heat, humidity, and insects. Technical challenges have centred around not being able to use multiple tripod-mounted cameras in certain locations, as well as common lighting problems. The latter issue is evident in overexposed footage due to the bright tropical sun, or grainy footage resulting from a lack of light. In addition, the time-consuming nature of the editing process must be taken into account. Utilising the huge array of editing options contained in the Adobe Premier Pro CC suite has been a steep learning curve, considering my lack of previous experience. The basics of editing are not overly challenging to learn, but the length of time needed to properly edit footage is considerable, so much so that incorporating large amounts of highly-edited video footage into the corpus of a three-to-four year postgraduate research project may not always be appropriate.

5. Conclusions and suggestions for best practice

The most important message from my research is that LD&D fieldwork continues to have problems related to its perception, preparation, and practice. A precise definition of what constitutes fieldwork is difficult to outline, and unhelpful stereotypes still exist. Training appears to be inadequate; the results of an informal examination of fieldwork preparation at a selection of Australian universities demonstrates that, with few exceptions, the amount of formal technical and practical preparation offered for postgraduate fieldworkers is limited and ad-hoc. Insufficient technical training stems from a lack of taught field methods units, while deficiencies in practical preparation can be linked to inadequate discussion prior to commencement of fieldwork projects. In addition, the administrative processes relating to risk assessment and ethics are not always relevant to linguistic or anthropological fieldwork.

The consequences of outdated views around fieldwork and associated improper training processes for postgraduate students are varied and not always easily identifiable. The potential for physical and mental health problems in fieldworkers may be exacerbated by a culture in which lack of preparation, illness, self-deprivation, and danger are still seen by some as pre-requisites. A more observable effect is a lack of research outputs, output of questionable quality, or non-completion of postgraduate candidature. Included in the second category is the existence of archived corpora which are high in quantity but low in production or annotation quality, a problem which is clearly evident when examining video recordings in archived corpora.

The issues raised in this paper, most of which have been discussed elsewhere, require a range of strategies for any improvements to occur. While I concede there are no quick and easy solutions, there are a number of policy amendments, which if consistently implemented together, would assist in achieving better practices.

In truth, it may be somewhat impractical to try to change outdated and narrow perceptions held by more senior, experienced linguists. Instead, the focus should be on presenting an inclusive and balanced view of what constitutes fieldwork to new researchers. A good start would be to include an overview of fieldwork in introductory undergraduate courses.¹⁵ This could be as little as one lecture which outlines a brief history of traditional descriptive fieldwork, how contemporary LD&D differs to this, examples of prototypical and non-prototypical situations, and the rewards and challenges of fieldwork.

The inclusion of taught field methods units should be mandatory for improving training standards. Unfortunately, this appears to be considered an ideal rather than a requirement. Insufficient financial resources are the primary obstacle here, and as such departments may need to become creative in how these courses are funded. As an example, the UoS strategy of funding field methods through the research grant of a faculty member demonstrates how this can be achieved. This is not ideal as it essentially requires academic staff to find additional funding. But it is one method which can ensure that students have a modicum of formal training in the utilisation of appropriate equipment, and the best-practice procedures for data collection, collation, and management.

Ensuring that students are prepared and suited to the practical and emotional expectations of fieldwork is challenging. The point has been made to me informally (Dineke Shokkin pers.comm.), and by an anonymous reviewer, that identifying objective criteria to assess a candidate's fieldwork suitability via application forms or face-to-face discussion is difficult. The type of personal information required for this type of assessment may not be that which applicants are comfortable conveying. In addition, the hardships of a particular field site may always be unknown to some degree. I would argue, however, that any pre-fieldwork assessment is better than none – and that implementing some sort of

¹⁵ The eight universities were not questioned about undergraduate teaching. A cursory examination of the online descriptions of first year linguistics courses shows no mention of LD&D fieldwork.

obligatory discussion about well-known challenges need not be arduous. The current policy at UQ, which includes explicit questions in application forms together with obligatory informal discussion, is a good approach. This should be complemented by structured pre-fieldwork and post-fieldwork briefings of the sort previously utilised by LTU.

The problem of irrelevant content in ethics and risk assessment forms can be addressed through flexibility on the part of ethics and risk assessment committees. Allowing senior linguists to add relevant sections, or at least have some input into these forms or the committees creating them, would go some way to ensuring that linguistic fieldwork ethics forms could at least be separated from those relating to medical research. As an example, I would point to the current ethics and risk assessment processes for students conducting fieldwork at the SOAS, University of London.¹⁶ In addition to some broad-ranging questions, these also include details relevant for linguistic and anthropological fieldwork, rather than simply being slightly-amended medical research forms. In addition, they require completion of multiple stages prior to the initial field trip and must be updated on a regular basis.

The less-than-impressive quality of archived video data discussed in Section 4.3 can be addressed by increased levels of training. Admittedly, my personal experience has demonstrated that the time and expertise required to produce higher-quality short films tailored for specific speech communities is not suited to all LD&D projects. However, if the goal of collecting video data is to represent long-lasting linguistic, cultural, and ethnographic documentation, then a minimum standard for archived recordings must be met. A basic desideratum could be: high definition video format, minimal camera movement and limited use of the zoom function, use of appropriate accessories (e.g. tripods) during recording, and at least some attempt at basic editing. The knowledge required to achieve this is not excessive and easily taught. Moreover, open-source software for basic editing functions of joining, splitting, trimming, and exporting files in different formats is easily available.¹⁷

A greater focus on technical training, together with the implementation of formalised pre-fieldwork discussions and a relevant ethics and risk assessment process will provide multiple benefits. More-technically adept fieldworkers

¹⁶ See soas.ac.uk/research/ethics/ (accessed 2018-06-19)

¹⁷ Well-known free video editing programs include TxMuxer (forum.doom9.org/showthread.php?t=168539), Avidemux (avidemux.sourceforge.net), and Handbrake (handbrake.fr).

will produce higher-quality digital audio and video corpora which, when deposited in archives, will be more likely to attain their intended aim as enduring documentary linguistic and cultural records. What is more, a decrease in the likelihood of personal and emotional issues in the field will lead to more productive research activities and a higher rate of completed postgraduate studies and other research outputs – the preferred result for both fieldworkers and universities.

References

- Abbi, Anvita. 2001. *A manual of linguistic field work and structures of Indian languages*. Munich: Lincom Europa.
- Aikhenvald, Alexandra Y. 2007. Linguistic fieldwork: setting the scene. *Sprachtypologie und Universalienforschung* (Focus on Linguistic Fieldwork, ed. by Alexandra Y. Aikhenvald) 60(1), 3-11.
- Austin, Peter K. 2006. Data and language documentation. In Jost Gippert, Nikolaus P. Himmelmann & Ulrike Mosel (eds.) *Essentials of language documentation*, 87-112. Berlin: Mouton de Gruyter.
- Austin, Peter K. 2007a. There's fieldwork and there's fieldwork. *Transient Languages and Cultures* (University of Sydney weblog), 10 April 2007. http://blogs.usyd.edu.au/elac/2007/04/theres_fieldwork_and_theres_fi.html (accessed 2017-02-27) and *Endangered Languages and Cultures* blog, <http://www.paradisec.org.au/blog/2007/04/theres-fieldwork-and-theres-fieldwork/> (accessed 2018-06-10)
- Austin, Peter K. 2007b. Training for language documentation: Experiences at the School of Oriental and African Studies. In D. Virginia Rau & Margaret Florey (eds.) *Documenting and revitalizing Austronesian languages*, 25-41. Honolulu: University of Hawaii Press.
- Austin, Peter, K. 2012a. Language documentation. In Mark Aranoff (ed.) *Linguistics Bibliography*, 1-19. New York: Oxford Bibliographies Online. DOI: 10.1093/OBO/9780199772810-0075.
- Austin, Peter, K. 2012b. Hammers and nails. *Transient Languages and Cultures* blog, 23 April 2012. [paradisec.org.au/blog/2012/04/hammers-and-nails/](http://www.paradisec.org.au/blog/2012/04/hammers-and-nails/) (accessed 2017-10-06)
- Austin, Peter K & Julia Sallabank. 2011. Introduction. In Peter K. Austin & Julia Sallabank (eds.) *The Cambridge handbook of endangered languages*, 1-24. Cambridge: Cambridge University Press.
- Australian Bureau of Statistics. 2007. National Survey of Mental Health and Wellbeing: Summary of Results. abs.gov.au/ausstats/abs@.nsf/mf/4326.0 (accessed 2017-05-12)
- Brickell, Timothy. 2015. *A grammatical description of the Tondano (Toundano) language*. PhD dissertation. Melbourne: La Trobe University.

- Blust, Robert A. 1980. Austronesian etymologies. *Oceanic Linguistics* 19, 1-181.
- Blust, Robert A. 1991. The greater central Philippines hypothesis. *Oceanic Linguistics* 30 (2), 73-129.
- Blust, Robert A. 2012. *The Austronesian Languages*. Canberra: Asia-Pacific Linguistics.
- Bohnenmeyer, Jürgen, Melissa Bowerman & Penelope Brown. 2001. Cut and break clips. In Stephen C. Levinson & N. J. Enfield (eds.) *Manual for the field season 2001*, 90-96. Nijmegen: Max Planck Institute for Psycholinguistics.
- Bowern, Claire. 2008. *Linguistic fieldwork: A practical guide*. New York: Palgrave Macmillan.
- Cameron, Deborah, Elizabeth Frazer, Penelope Harvey, Benjamin Rampton & Kay Richardson. 1997. Ethics, advocacy and empowerment in researching language. In Nicolas Coupland & Adam Jaworski (eds.) *Sociolinguistics: A reader and coursebook*, 145-162. Hampshire: Macmillan Press Ltd.
- Chafe, Wallace. (ed.) 1980. *The pear stories: Cognitive, cultural, and linguistic aspects of narrative production*. Norwood: Ablex.
- Chelliah, Shobhana & Willem J. De Reuse. 2011. *Handbook of descriptive linguistic fieldwork*. Dordrecht: Springer.
- Crowley, Terry. 2007. *Field Linguistics. A Beginner's Guide*. Oxford: Oxford University Press.
- Dwyer, Arienne. 2006. Ethics and practicalities of cooperative fieldwork and analysis. In Jost Gippert, Nikolaus P. Himmelmann & Ulrike Mosel (eds.) *Essentials of language documentation*, 31-66. Berlin: Mouton de Gruyter.
- Evans, Nicholas & Alan Dench. 2006. Introduction: Catching language. In Felix K. Ameka, Alan Dench & Nicholas Evans (eds.) *Catching language: The standing challenge of grammar writing*, 1-39. (Trends in Linguistics. Studies and Monographs 167.) Berlin: Mouton de Gruyter.
- Everett, Daniel. 2016. Facebook posting. www.facebook.com/d.leonard.everett/posts/10154084009778198?pnref=story (accessed 2016-10-06)
- Florey, Margaret. 2005. Language shift and endangerment. In Alexander Adelaar & Nikolaus P. Himmelmann (eds.) *The Austronesian languages of Asia and Madagascar*, 43-64. London: Routledge.
- Gasser, Emily. 2017. The right to say yes: Language documentation in West Papua. *Australian Journal of Linguistics* 34 (4), 502-526.
- Good, Jeff. 2011. Data and language documentation. In Peter K. Austin & Julia Sallabank (eds.) *The Cambridge handbook of endangered languages*, 212-234. Cambridge: Cambridge University Press.

- Google Maps. 2018. Indonesia, scale undetermined. [google.com/maps/place/Indonesia/@2.6267157,115.602835,5z/data=!4m5!3m4!1s0x2c4c07d7496404b7:0xe37b4de71badf485!8m2!3d-0.789275!4d113.921327](https://www.google.com/maps/place/Indonesia/@2.6267157,115.602835,5z/data=!4m5!3m4!1s0x2c4c07d7496404b7:0xe37b4de71badf485!8m2!3d-0.789275!4d113.921327) (accessed 2018-04-23)
- Henley, David. 1993. Nationalism and regionalism in colonial Indonesia: The case of Minahasa. *Indonesia* 55, 91-112.
- Himmelmann, Nikolaus P. 1998. Documentary and descriptive linguistics. *Linguistics* 36, 161-195.
- Himmelmann, Nikolaus P. 2002. Documentary and descriptive linguistics (full version). In Osamu Sakiyama & Fubito Endo (eds.) *Lectures on endangered languages* 5, 37-83. Kyoto: Endangered Languages of the Pacific Rim.
- Himmelmann, Nikolaus P. 2006. Language documentation: what is it and what is it good for? In Jost Gippert, Nikolaus P. Himmelmann & Ulrike Mosel (eds.) *Essentials of language documentation*, 1-30. Berlin: Mouton de Gruyter.
- Howell, Nancy. 1990. *Surviving fieldwork. A report of the advisory panel on health and safety in fieldwork*. Washington: American Anthropological Association.
- Hyman, Larry. 2001. Fieldwork as a state of mind. In Paul Newmann & Martha S. Ratliff (eds.) *Linguistic fieldwork*, 15-33. Cambridge: Cambridge University Press.
- Jacobson, Michael, J. 2002. On the question of contemporary identity in Minahasa, North Sulawesi province, Indonesia. *Asian Anthropology* 1, 31-58.
- Jukes, Anthony, R. 2011. Culture documentation and linguistic elicitation. In Nicholas Thieberger, Linda Barwick, Rosey Billington & Jill Vaughan (eds.) *Sustainable data from digital research: Humanities perspectives on digital scholarship*, 47-62. Melbourne: Custom Book Centre, University of Melbourne.
- Kray, Karen, P. 2006. *Operasi lilin dan ketupat: Conflict prevention in North Sulawesi, Indonesia*. MA dissertation. University of Ohio.
- Lundström-Boorghorn, Wil. 1981. *Minahasa civilization: A tradition of change*. Sweden: Acta Universitatis Gothoburgensis.
- Macaulay, Monica. 2004. Training linguistics students for the realities of fieldwork. *Anthropological Linguistics* 46(2), 194-209.
- Margetts, Anna & Andrew Margetts. 2012. Audio and video recording techniques. In Nicholas Thieberger (ed.) *The Oxford handbook of linguistic fieldwork*, 13-53. Oxford: Oxford University Press.
- Mead, David. 2013. *An initial assessment of the vitality of the indigenous languages in North Sulawesi, Indonesia*. North Carolina: Sulawesi language alliance.
- Merrifield, Scott & Martinus Salea. 1996. *North Sulawesi language survey*. (Summer Institute of Linguistics Publications in Sociolinguistics 1) Dallas: SIL.

- Nathan, David. 2010. Sound and unsound practices in documentary linguistics: towards an epistemology for audio. In Peter K. Austin (ed.) *Language Documentation and Description*, Vol. 7, 172-208. London: SOAS.
- Nathan, David. 2011. Digital archiving. In Peter K. Austin & Julia Sallabank (eds.) *The Cambridge handbook of endangered languages*, 255-273. Cambridge: Cambridge University Press.
- Newman, Paul. 2009. Fieldwork and field methods in linguistics. *Language Documentation & Conservation* 3(1), 113-125.
- Newman, Paul & Martha Ratliff. 2001. Introduction. In Paul Newmann & Martha Ratliff (eds.) *Linguistic Fieldwork*, 1-14. Cambridge: Cambridge University Press.
- Passaro, Joanne. 1997. You can't take the subway to the field! Village epistemologies in the global village. In Akhil Gupta & James Ferguson (eds.) *Anthropological locations: Boundaries and grounds of a field science*, 147-162. California: University of California Press.
- Rehg, Kenneth L. 2007. The language documentation and conservation initiative at the University of Hawai'i at Mānoa. In Virginia Rau & Margaret Florey (eds.) *Documenting and revitalizing Austronesian languages*, 13-24. Honolulu: University of Hawai'i Press.
- Ross, Malcolm. 1995. Some current issues in Austronesian linguistics. In Darrel Tryon (ed.) *Comparative Austronesian dictionary: An introduction to Austronesian studies*, 45-120. Berlin: Mouton de Gruyter.
- Sakel, Janet & Daniel Everett. 2012. *Linguistic fieldwork: A student guide*. Cambridge: Cambridge University Press.
- Samarin, William. J. 1967. *Field Linguistics: A Guide to Linguistic Field Work*. New York: Holt, Reinhart, and Winston.
- Seifart, Frank. 2012. The threefold potential of language documentation. In Frank Seifart, Geoffrey Haig, Nikolaus P. Himmelmann, Dagmar Jung, Anna Margetts & Paul Trilsbeek (eds.) *Potentials of language documentation: Methods, analyses, and utilization*, 1-6. Honolulu: University of Hawaii Press.
- Sneddon, James N. 1970. The languages of Minahasa, North Celebes. *Oceanic Linguistics* 9(1), 11-36.
- Sneddon, James, N. 1978. *Proto-Minahasan: phonology, morphology and wordlist*. Canberra: Pacific Linguistics.
- Stebbins, Tonya. 2003. *Fighting language endangerment: Community directed research on Sm'algyax (Coast Tsimshian)*. Osaka: Osaka Gakuin University.
- Universities Australia. 2015. Higher education and research facts and figures. www.universitiesaustralia.edu.au/australias-universities/key-facts-and-data (accessed 2017-10-03)

- Woodbury, Anthony C. 2003. Defining documentary linguistics. In Peter K. Austin (ed.) *Language Documentation and Description*, Vol. 1, 35-51. London: SOAS.
- Woodbury, Anthony C. 2011. Language documentation. In Peter K. Austin & Julia Sallabank (eds.) *The Cambridge handbook of endangered languages*, 159-186. Cambridge: Cambridge University Press.
- Wolff, John. 2010. *Proto Austronesian phonology with glossary*. New York: Cornell University Southeast Asia Program Publications.
- Yamada, Racquel-Maria. 2007. Collaborative linguistic fieldwork: Practical application of the empowerment model. *Language Documentation & Conservation* 1(2), 257-282.
- Zorc, David R. 1986. The genetic relationships of Philippine languages. In Paul Gerahty, Lois Carrington & Stephen A. Wurm (eds.) *Tracking the Travellers* (FOCAL II: Papers from The Fourth International Conference on Austronesian Linguistics), 147-173. Canberra: Pacific Linguistics.