Multilingual elicitation in a multilingual fieldwork setting*

Anne Mucha

Leibniz-Institut für Deutsche Sprache (IDS), Mannheim

Abstract: In semantic fieldwork, it is common to use a language other than the language under investigation for presenting linguistic materials to the language consultants, e.g. discourse contexts in acceptability judgment tasks. Previous works commenting on the use of a 'meta-language' or 'language of wider communication' in this sense (AnderBois and Henderson 2015; Matthewson 2004) have argued that this practice is not methodologically inferior to the exclusive use of the object language for elicitation, but that the fieldworker needs to be alert to potential influences of the meta-language or, indeed, the object language, on the elicited judgments. Thus, the choice of a language for presenting discourse contexts is an integral component of fieldwork methodology. This paper provides a research report with a focus on this component. It describes a multilingual fieldwork setting offering several potential meta-languages, which the fieldworker and the consultants master to varying degrees. The choice of the languages in this setting is discussed with regard to methodological, social and practical considerations and related to selected, more general methodological questions regarding semantic fieldwork practice.

Keywords: meta-language, elicitation, multilingualism, research report

1 Introduction

This paper presents a case study of individual fieldwork practice by example of an investigation in Bamileke-Medumba (Grassfields Bantu). Rather than providing a detailed description of the workflow or any particular fieldwork technique, however, I will focus on one particular aspect of the fieldwork setting: the use of a meta-language for eliciting data in translation and acceptability judgment tasks. In Matthewson (2004)'s influential guidelines on semantic fieldwork methodology, the term 'meta-language' is used in reference to a fieldwork situation where a language other than the language that is being investigated (i.e. the 'object language') is used for presenting context scenarios in acceptability judgment tasks. A simple example is given in (1), where the object language is German and the meta-language is English. Imagine we want to investigate whether the German definite article carries a uniqueness presupposition. To approach this question, we might present a native speaker of German (who also understands English) with a context like (1), which is set up to violate uniqueness for the definite description in the German target sentence. The language consultant will then be asked to judge the acceptability of the target sentence in the given context. (Since the definite description in the German target sentence indeed requires uniqueness, the sentence is expected to be judged as infelicitous.)

(1) Context: The new school year starts and Mr. Smith has three new students in his class: Ahmed, Ben and Paul. Mr. Smith informs his class:

   #Der neue Schüler sitzt in der letzten Reihe.
    the new student sits in the last   row
   'The new student is sitting in the last row.'

   Matthewson (2004) already provides quite detailed discussion on the use of a meta-language in acceptability judgment tasks. In particular, this practice is defended against worries expressed in the literature (Matthewson mentions Harris and Voegelin 1953) that the meta-language might bias the consultants towards accepting or producing constructions that are otherwise not acceptable in the object language. Matthewson however argues that while the concern is legitimate in principle, it does not call for exclusive use of the object language in elicitation since, firstly, the influence of the meta-language on the consultants' judgments is negligible and secondly, presenting context descriptions in the object language can just as easily influence the obtained results. Therefore, Matthewson (2004) argues that the use of a meta-language for context descriptions might even be preferable in some cases.

   A similar argument is made very explicitly and systematically in AnderBois and Henderson (2015). They present case studies in two Mayan languages, illustrating how the use of the object language for presenting discourse contexts can either be problematic or helpful for eliciting valid acceptability judgments, depending on the phenomenon to be investigated and the properties of the respective languages. Their example of a situation where the use of a meta-language (Spanish, in this case) is preferable concerns the two attitude complement constructions in Yucatec Maya shown in (2). These differ in that only in (2b) the attitude predicate is suffixed with the topic marker *-e'*.[1]

(2) Yucatec Maya (AnderBois and Henderson 2015:217)

   a. K-in   tukl-ik   yan u   k'áax-al ja'.
       imp-A1 think-stat   will A3 fall-stat water
       ≈ 'I think it's going to rain.'   Bare Clause

   b. K-in   tukl-ik-e'   yan u   k'áax-al ja'.
       imp-A1 think-stat-top   will A3 fall-stat water
       ≈ 'It's going to rain, I think.'   Topic + Clause

   The hypothesis that the authors wanted to test is that the *e'*-morpheme marks the attitude as backgrounded, thus giving rise to the parenthetical interpretation reproduced in the translation of (2b). The authors propose that this hypothesis is best tested by presenting contexts in the form of a Question Under Discussion ('QUD', in the sense of Roberts 2012) to bring out the at-issue content of the sentences in (2a) and (2b). The problem that would arise if the context were presented in the object language is that any QUD targeting the attitude report (e.g. 'Do you think it will rain?') would necessarily involve one of the two constructions under investigation. It would then be unclear

---

[1] AnderBois and Henderson (2015) use the following abbreviations in their glosses: A1 - 1st person Ergative, A3 - 3rd person Ergative, imp - imperfective aspect, stat - "status" suffixes, top - topic marker. In the Medumba examples in Section 2, abbreviations used in glosses are: aftn - afternoon (time of day marker), ipfv - imperfective aspect, morn - morning (time of day marker), npst - near past, prt - particle, rfut - remote future, rpst - remote past.

whether the (un)acceptability of the target construction is due to the semantics of the QUD or due to its form.

AnderBois and Henderson (2015) argue that in this case, the use of Spanish as a meta-language is to be preferred from a methodological point of view. They paired the utterances in (2) with i) a QUD that triggers a reading under which the whole attitude report is at-issue ('¿Piensas tú que va a llover?'/ 'Do you think it's going to rain?') and ii) a QUD that triggers a backgrounded/non-at-issue reading for the attitude ('¿Va a llover?'/ 'Is it going to rain?'). They find that the bare clause construction in (2a) is preferred as an answer to the first question and the topic + clause construction in (2b) is a better answer for the second question, in line with their hypothesis (see AnderBois 2016 for details of this work). More crucially for present purposes, they avoid any bias on the consultants' judgments due to the form of the context question.

This case reported by AnderBois and Henderson (2015) is presented here in some detail since it also applies to the fieldwork setting that I will discuss in Section 2, i.e. the case of temporal and aspectual interpretation in Medumba. As both Matthewson (2004) and AnderBois and Henderson (2015) discuss in detail, there are several factors apart from purely methodological considerations that might favor or disfavor the use of the object language for the presentation of contexts or communication between the fieldworker and the consultant. Individual consultants might be uncomfortable or unwilling to use a certain meta-language for sociolinguistic reasons, for instance because they associate this language with oppression and marginalization. Moreover, an important practical restriction concerns the fieldworker's and consultants' language proficiency. AnderBois and Henderson (2015) report on fieldwork in languages that still have monolingual speakers, or at least speakers who use their native language predominantly in everyday life. In such a case, exclusive use of the object language in fieldwork would be the preferred option when there is no meta-language available that the consultant would feel comfortable with. Conversely, and this is probably a fairly common situation among semantic fieldworkers (and also mentioned in the cited works), the fieldworker might not be proficient enough in the object language to also use it for communication with the language consultants, which makes the use of a meta-language a necessity. Of course, in an ideal situation, a fieldworker works on an understudied language for several years or even decades and can focus on this research to an extent that allows her to acquire active knowledge in this language to a point where the fieldwork itself as well as more informal conversation with the consultants can happen mostly in the consultants' native language. In this ideal case, the fieldworker can choose to work only with monolingual speakers of the object language (if there are still monolingual speakers) or work with bilingual speakers and make an informed decision between using the object language or a meta-language for presenting contexts based on factors such as those described by AnderBois and Henderson (2015). However, while there seems to be a broad consensus that a fieldworker starting to work on a new language should acquire as much knowledge of the object language as possible as quickly as possible,[2] semantic fieldwork in practice often relies on a meta-language. In what follows, I will presume (in accordance with Matthewson 2004, 2011 and many others) that the use of a meta-language in semantic fieldwork is not in itself problematic from a methodological point of view. The question addressed in this contribution is similar as in AnderBois and Henderson (2015): what language does the fieldworker use for presentation of contexts and communication with the consultants when there are several options? However, the situation that I will discuss, drawing from my own fieldwork on Medumba, is one where several potential meta-languages are available, but

---

[2] See, e.g., Vaux and Cooper (1999) and Rice (2012) on social and ethical aspects of engaging with the language and culture of the consultants.

none of them is spoken (near) natively by all fieldwork agents.[3] Although this particular situation might be somewhat rare, the conclusions I propose can hopefully be useful beyond such multilingual fieldwork contexts and make a modest addition to the discussion in AnderBois and Henderson (2015) and related work.

In the next section I will present the case study on Medumba. I will start with some general considerations concerning the employed terminology as well as the relevance of a multilingual fieldwork setting for more general methodological issues in conducting fieldwork (as brought up by Pasquereau 2020). In Subsection 2.1, I briefly introduce the phenomenon under investigation and sketch some of the research questions that guided the described fieldwork. Subsection 2.2 describes the multilingual fieldwork setting, in particular the linguistic profiles of the fieldwork agents. In Subsection 2.3 the actual practice used in the fieldwork is discussed. Section 3 presents some conclusions.

2 A case study on Medumba

Let me start with a note on terminology. In the introduction, I used the terms 'object language' and 'meta-language' (following Matthewson 2004) to refer to the language under investigation and the language used for elicitation, respectively. AnderBois and Henderson (2015) prefer the label 'language of wider communication' ('LWC', adopted from Grenoble and Whaley 2006) over 'meta-language' since the latter is also a technical term in formal semantics (as also noted in Matthewson 2004). Either way, the assumption is that the same language will be used for the presentation of linguistic elicitation material (e.g. discourse contexts) and communication with the language consultants. In the case study that I will present below, this isn't always the case. Depending on the particular consultants and their linguistic profile, discourse contexts may have been presented in English but discussions with the consultant took place in French, for instance. For this reason, I will adopt both Matthewson (2004)'s and AnderBois and Henderson (2015)'s terminology in the following way: I will use 'meta-language' to refer to the language in which discourse contexts and other linguistic materials are presented to the consultant, and 'language of wider communication' (LWC) for the language(s) in which the fieldwork agents talk to each other.

As will become clearer in the following subsections, the choice of the meta-language and LWC in a multilingual fieldwork setting touches upon several broader issues concerning general fieldwork practice. In order to relate the present contribution to the broader goal of this special issue, some pertinent questions raised by Pasquereau (2020) are listed below. At this point, I will just briefly describe how these questions are relevant in a multilingual fieldwork setting, and I will elaborate in Section 2.3.

1. How do you start working with new consultants?

   In any fieldwork setting, an integral part of getting to know the consultant is to understand their linguistic profile. Especially in a multilingual setting as described below, the fieldworker must find out what language(s) the consultant feels comfortable using, and to what extent the fieldwork agents' language proficiencies concur.

---

[3] I will use 'fieldwork agents' as a cover term for fieldworker and language consultants.

2. Do you do 'one-on-one' vs. 'many-on-one' elicitation session, or both?

This question refers to the difference between working with only one consultant or several consultants at a time. While 'one-on-one' elicitation appears to be a fairly common practice, Pasquereau (2020) and Cable (2020) list a variety of potential advantages (and disadvantages) of 'many-on-one' elicitations with small groups of speakers. For instance, individual consultants might be more comfortable in a group, especially if they do not know the fieldworker yet and are not familiar with the workflow in a fieldwork situation. They might also feel more confident giving judgments if they can discuss them with other native speakers, and these discussions may yield additional insights and valuable data beyond what the fieldworker had planned to elicit. On the other hand, group dynamics may cause speakers to influence each other's judgments and thus blur meaningful variation. In a multilingual fieldwork setting, many-on-one elicitations can facilitate work with speakers whose preferences for an LWC diverge from the fieldworker's. If another native speaker consultant is fluent in both potential LWCs, the fieldwork agents can resort to multilingual discussion of the fieldwork material. In this sense, a multilingual fieldwork setting might provide additional motivation to do 'many-on-one' elicitations.

3.   a. We can expect any data set to contain variation: some of it will be random, some of it will be meaningful. How can we discriminate between the two?

  b. Is there a minimal amount of replicability (both within and across speakers) that you require?

Working with several meta-languages for acceptability judgment and translation tasks introduces a potential additional source of variation in the data. I will propose that, conversely, variation in relevant grammatical properties of the meta-languages might be useful in discerning between random and meaningful variation in the elicited object language data. As fieldworkers, we obviously require valid data to be replicable across different speakers and different occasions. In addition, our fieldwork studies need to be replicable by other fieldworkers working on different languages and, consequently, fieldwork methodology needs to be replicable across meta-languages as well. Of course, an individual fieldworker can adjust a particular discourse context or questionnaire for the meta-language she uses (just like discourse contexts often need to be adjusted to socio-cultural factors of the research environment, see e.g. Bochnak and Matthewson 2020 on this point). A multilingual fieldwork setting prompts the researcher to reflect on what properties of the meta-language might have an effect on the elicited data, and to ensure replicability across the meta-languages used in the study.

These questions will be taken up again below. Before discussing the setting and practice in the actual fieldwork situation, however, I provide a brief introduction of the language and phenomenon under investigation in the next subsection.

2.1 The phenomenon

The research reported here is concerned with the temporal system of the Grassfields Bantu language Medumba, mainly spoken in the West region of Cameroon by approximately 210.000 speakers. While, to the best of my knowledge, no comprehensive research grammar of Medumba is available,

the language has been subject to quite extensive research in the areas of phonology and morphology (see e.g. Danis, Barnes, and O'Connor 2012; Franich, O'Connor, and Barnes 2012; Voorhoeve 1965) as well as in-depth descriptions and analyses of syntactic phenomena which also include some discussion of the temporal system (e.g. Kouankem 2012, and more recently Keupdjio 2020). Moreover, the research reported here could build on a detailed study dedicated to tense, aspect and modality (TAM) in Medumba, namely Nganmou (1991).

A particularly interesting property of TAM in Medumba is that the language has a rich and complex 'graded tense' system with several remoteness distinctions both in the past and in the future domains. This means that Medumba has past and future markers that not only locate a situation before or after the evaluation time, but in addition provide information on the temporal remoteness of the situation. In (3a) and (3b), this is illustrated with the temporal markers for remote past and remote future, respectively.

(3)   a.   mə **ná'** nɛ́n ntɑn
           I   rpst go   market
           'I went to the market (in the remote past).'

      b.   Louise **á' zí** nɛ́n ntɑn
           Louise rfut   go   market
           'Louise will to the market (in the remote future).'

Graded tense systems of this kind had not received much attention in the formal semantics literature until about a decade ago, and the literature available to date suggests that there is quite some variation in the exact semantic workings of temporal remoteness morphemes[4] (see for example Hayashi 2011; Hayashi and Oshima 2015 on Inuktitut, Cable 2013 on Gĩkũyũ, Klecha and Bochnak 2016 on Luganda). A detailed discussion of the phenomenon in Medumba and in other languages is certainly beyond the scope of this paper. Therefore, I restrict the presentation to some basic proposals and observations (taken from Mucha 2015, 2017) that will be relevant for understanding the examples in Section 2.3.

Firstly, the temporal morphemes that belong to the graded past marking system of Medumba actually fall into two classes: past remoteness markers and 'time of day' markers, listed in (4) and (5), respectively. The former encode a distinction between near past and remote past, and the latter specifiy the time of day at which the eventuality under consideration occurred. All of these markers are functional temporal morphemes. They differ from temporal adverbials in that they occur in preverbal position and cannot be used as fragment answers (see Section 2.3.2 for some examples and Mucha 2017 for more detailed discussion).

(4)   Past remoteness markers

      a.   *lú/ fə*: near past (≈ not more than a few days before the utterance time)

      b.   *lû/ ná'*: remote past (≈ more than a few days before the utterance time)

---

[4] Cable (2013) introduced the term 'temporal remoteness morphemes' which, compared to 'graded tenses', is more neutral with respect to the ultimate semantic analysis of the markers.

(5) 'Time of day' markers

    a. *zí* ≈ nighttime/very early morning

    b. *cág* ≈ morning

    c. *jɔ̄g* ≈ afternoon

Co-occurrence of elements within the classes in (4) and (5) is highly restricted, but past remoteness markers can co-occur with time of day markers. An example sentence that contains both a remoteness marker and a time of day marker is given in (6).[5]

(6)   mə fə cág nɛ́n ntɑn
      I npst morn go market
      'I went to the market (this morning/ yesterday morning).'

Moreover, Medumba has several temporal markers that give rise to imperfective aspectual interpretation, e.g. *cwɛd* in (7a) and *kə́* in (7b) (differences between these markers will be discussed in Section 2.3.2).

(7) a. Nana cwɛd ná cəŋ   b. Nana ná' kə́ nǎ ŋkwún
          Nana ipfv cook food   Nana rpst ipfv cook beans
          'Nana is cooking food.'   'Nana was cooking beans.'

However, overt morphological marking of tense and aspect is grammatically optional in Medumba, i.e., temporally unmarked clauses are also possible, as illustrated in (8).

(8)   Nana ná   cəŋ
      Nana cook food
      'Nana cooked food.'

The overall goal of the described fieldwork was not exactly modest. Starting from existing semantic studies on cross-linguistic temporal reference, the aim was to provide a comprehensive semantic analysis of the Medumba tense/aspect system, including the semantics of the temporal remoteness morphemes both in the past and in the future, aspectual markers as in (7) and temporally unmarked clauses as in (8). Although descriptions of tense and aspect in Medumba were available (mainly in Nganmou 1991, also Kouankem 2012), these descriptions were partly in disagreement with each other and with the first elicitations that I conducted. Therefore, quite a lot of basic elicitation work was still necessary at the beginning to investigate the distribution and interpretational properties of the different temporal markers. Section 2.3 mainly refers to this rather exploratory foundational work. Before we turn to this, the next subsection describes the multilingual fieldwork

---

[5] A reviewer asks whether this sentence could occur without *fə* in its hodiernal ('this morning') interpretation, and whether one construction would be more 'natural' than the other. Data from translation tasks (as well as the description in Kouankem 2012) indeed suggest that *fə* is most commonly used to refer to events on the previous day, and omitted when the event took place on the morning of the same day. The near past meaning of *fə* however was robustly established in acceptability judgment tasks (see Mucha 2017 for the relevant data).

setting, including some information on the linguistic landscape of Cameroon and the linguistic profiles of the fieldwork agents.

2.2   Description of the multilingual fieldwork setting

As mentioned above, Medumba is an indigenous language of Cameroon. Cameroon is characterized by a particularly complex linguistic landscape, even when compared to other countries in Sub-Saharan Africa. Simons and Fennig (2017) estimate the number of living indigenous languages spoken in Cameroon at 275 (covering three major language families: Niger-Congo, Afro-Asiatic and Nilo-Saharan), and classify Cameroon as the linguistically most diverse country in Africa as measured by Greenberg's diversity index.[6] However, none of the local languages has the status of an official language in Cameroon; the official languages are English and French.

Both languages have equal official status throughout the country, and bilingualism is promoted and strived for by the government and implemented in higher education (Sosso 2020).[7] However, not all Cameroonians are proficient in both English and French. As a heritage from Cameroon's colonial history, two of the ten regions (the Southwest region and the Northwest region, see the map in Figure 1[8]) are predominantly Anglophone, while the other eight regions are predominantly Francophone. Depending on the region, English or French, respectively, are spoken by most Cameroonians in addition to the local native languages. French is used as the language of instruction in nursery, primary and secondary school education in the Francophone parts of the country, and English in the Anglophone parts. Local languages are not systematically taught in schools throughout the country. Moreover, French, English or 'Cameroon Pidgin' (an English-based Creole that is widely used as a lingua franca) are predominant in some fam-

Figure 1: Regions of Cameroon

ilies where the parents grew up with different indigenous languages. Given this diverse linguistic landscape, most Cameroonians are multilingual: They grow up with English or French and one or

---

[6] Greenberg's diversity index (ranging from 0 to 1) is the probability that any two randomly selected members of the population will have different mother tongues, i.e. 0.974 in Cameroon according to Simons and Fennig (2017).

[7] Sosso (2020) provides detailed and up-to-date discussion of the linguistic landscape and sociolinguistic situation in Cameroon. Much of the information provided in this paragraph is based on overviews given in this work.

[8] The map in Figure 1 was retrieved from <https://www.worldatlas.com/maps/cameroon>, April 7, 2021.

more local languages, and some learn the other official language to a high degree of proficiency already in early childhood or in the course of their formal education.[9] However, a central result of the study reported in Sosso (2020) is that, although French-English bilingualism is a declared educational aim in Cameroon, there is significant variation in the degree of proficiency that individual speakers reach in the non-native official language.

This background on the linguistic landscape of Cameroon should suffice to set the stage for describing the multilingual setting in which the reported fieldwork took place. This fieldwork was conducted between 2013 and 2015 with three main consultants[10] in Yaounde, Cameroon and one in Berlin, Germany. Yaounde belongs to the Francophone Centre region of Cameroon, which borders on the likewise Francophone West region where Medumba is mainly spoken (next to numerous other languages). All language consultants grew up with Medumba and French as native languages, but in line with the general remarks made in the previous paragraph, there is variation between the speakers' linguistic profiles at least in i) their proficiency in English ii) the extent of exposure to and active use of Medumba, both in childhood and adulthood, iii) the degree of literacy in Medumba. Notably, this variation between the consultants is still smaller than in the overall population as described by Sosso (2020), since the consultants I worked with are very similar in terms of age and educational background: they were all young adults (age 25–35 at the time), and most of them have a very advanced formal education, i.e. a university degree. Table 1 gives a first overview of the linguistic profiles of the fieldwork agents considering the potential languages of communication.[11] An elaboration is provided below.

Table 1: Active language knowledge of the fieldwork agents: ✓ means the language is spoken fluently (as L2) or natively, (✓) means advanced or high intermediate knowledge, × means no active knowledge or just basic conversational knowledge

	French	English	German	Medumba
Consultant 1	✓	✓	×	✓
Consultant 2	✓	(✓)	×	✓
Consultant 3	✓	×	×	✓
Consultant 4	✓	✓	✓	✓
Fieldworker	(✓)	✓	✓	×

As noted explicitly in all previous works on semantic fieldwork that engage with the issue of the use of a meta-language, an obvious restriction concerns the language proficiency of the fieldworker. It is the fieldworker's responsibility to ensure that communication with the consultants runs as smoothly as possible, to avoid corruption of the research results due to miscommunication as

---

[9] In addition, students have the possibility to learn another European language such as German or Spanish in secondary school, but only in the Francophone regions, according to Sosso (2020:35).

[10] Several other speakers participated in the fieldwork studies in Yaounde on an occasional basis, mostly in the context of 'many-on-one' elicitations. The discussion in Section 2.3 however will be restricted to the work with the main consultants.

[11] This overview only includes the language under investigation (Medumba) and the languages that were used as meta-languages/LWCs, omitting any other languages the fieldwork agents know in addition. Some of the consultants speak another indigenous language beside Medumba. These languages are not listed here for the sake of privacy protection.

well as discomfort on the consultants' part due to awkward communication situations. Hence, researchers who plan to work on a language whose speakers they don't share a (near) native language with often need to prepare their fieldwork not only by learning (about) the object language, but also by improving their active knowledge of a potential meta-language/LWC. With this in mind, I was prepared to conduct most of the fieldwork with French as a meta-language and LWC so as not to be forced to restrict myself to working with English-speaking consultants. On the fieldwork site however, I found myself in a situation where most of the Medumba speakers who agreed to work with me also had some proficiency in English, including one main consultant who I had already been in contact and communicated in English with before. Quoting AnderBois and Henderson (2015:229), "[d]oing semantic fieldwork is hard enough without creating new obstacles that are unrelated to the research question", and since English was the language I used almost exclusively in professional contexts including previous field research, English as a meta-language and LWC would make the work a whole lot easier for me. It goes without saying however that the fieldworker always prioritizes the consultants' comfort over her own, and if there is an obstacle in the workflow it should always be on the fieldworker's side. Hence, the aim and challenge in this particular situation was to balance the linguistic proficiencies and preferences of the individual consultants and the fieldworker in a way that makes the workflow as smooth as possible while ensuring that every consultant was comfortable with the language(s) used in the fieldwork interviews. Before discussing how this challenge was met, I give some more information on the linguistic profiles of the individual consultants.[12]

Consultant 1 (C1), as noted above, is fluent not only in French and Medumba but also in English. In contrast to the other consultants, C1 has a background in linguistics and therefore some meta-knowledge on the grammar and orthography of Medumba. At the time at which the fieldwork took place, C1 had not done any linguistic work on Medumba, however.

Consultant 2 (C2) has advanced proficiency in English on a level comparable to my own proficiency in French, i.e., English could in principle be used both as a meta-language and as the LWC, but C2 was noticeably more comfortable speaking French than English. C2 has some basic literacy in Medumba, acquired in early adulthood. What is also interesting is that C2, in contrast to the other consultants, did not grow up in the Medumba language area and was exposed to Medumba only in the family. Thus C2 is strictly speaking a heritage speaker of Medumba, which might actually be reflected in the results of the judgments (see Section 2.3).

Consultant 3 (C3) speaks Medumba and French but no English. C3 also brought a somewhat different background to the fieldwork as Medumba was the predominant language in their everyday life at the time the fieldwork took place.

Consultant 4 (C4) is highly proficient not only in French and English, but also in German, which would in principle allow me to conduct the fieldwork in my native language. At the time of us working together, C4 lived outside of Cameroon and had little occasion for active use of the language. However, C4 grew up in the core language area of Medumba and spoke the language predominantly during childhood, had also learned to read and write Medumba and is involved in initiatives to produce information and teaching materials.

---

[12] These descriptions are intended to maintain anonymity of the language consultants, omitting any personal details and not revealing the gender of the respective individuals.

2.3 Discussion of the fieldwork practice

In this section I discuss how this multilingual constellation was managed in the fieldwork setting. The structure of the discussion roughly follows the selected questions from Pasquereau (2020) listed at the beginning of this section: first I briefly describe the starting point of the fieldwork and the arrangements concerning 'one-on-one' vs. 'many-on-one' elicitations, thus addressing question 1 and question 2. Then I address how the use of different meta-languages relates to variation in the object language data, pertaining to question 3.

2.3.1 Practical considerations – Finding the right languages

Many fieldworkers who start to work on a new topic in an under-researched language probably face the same dilemma that I did when preparing my first field trip to Cameroon: on the one hand, the duration of the trip is strictly limited, putting some pressure on work efficiency and demanding the fieldworker to obtain as much informative data as possible in a relatively short amount of time. It therefore seems reasonable to prepare as much material as possible before the field trip and try to minimize the necessary amount of non-elicitation work during the trip. However, in a situation where a lot of foundational work is still needed to understand the object of study, any in-depth investigation will depend on the outcome of these first elicitations and might eventually go in a completely different direction than the fieldworker anticipated. The information I had available to work with were i) previously acquired theoretical knowledge on the topics I investigated (i.e. tense and aspect), ii) descriptions of the tense/aspect system of Medumba from the previous literature (see Section 2.1), iii) the knowledge that Consultant 1 was a proficient English speaker and was ready to work with me. In what follows in this subsection, I will structure the description of the fieldwork setting according to the different ('one-on-one' or 'many-on-one') constellations we opted for in the elicitation sessions, and explain the motivation for the groupings as well as the choice of the meta-languages and LWCs.

'One-on-one' elicitation with Consultant 1   To start off the fieldwork as a whole, I prepared a couple of questionnaires containing translation tasks as well as a few simple acceptability judgment tasks to work on with Consultant 1, all of them in English. Based on the results, I created the first more informative acceptability judgment tasks for investigating the properties of the temporal system of Medumba to run with Consultant 1 on a later occasion. One-on-one elicitation with Consultant 1 would always take place with English both as the meta-language and as the LWC. The judgments elicited in English with Consultant 1 would later be tested in French with Consultant 3 (see below).

'One-on-one' elicitation with Consultant 2   Contact with Consultant 2 was established independently of Consultant 1; they did not know each other and Consultant 2 had no reservations against one-on-one elicitations, therefore we always worked alone. I had been told that Consultant 2 could also speak English, so I started out by using the English questionnaires, and we also used English as our LWC. English as a meta-language did not seem to pose any problems. However, when discussing the examples, Consultant 2 would often switch to French to express intuitions about interpretations or offer translations or explanations for a judgment. When it became clear that Consultant 2 was more comfortable with French as the LWC, I switched to French as well; communication both during and outside the actual elicitation sessions was almost exclusively in French with Consultant 2 from

then on. In case I had difficulties discussing elicitation tasks or materials in French, I would occasionally switch to English if necessary, and we would ask questions back and forth in either language until we were sure we understood each other. I used English as the meta-language for discourse contexts in acceptability judgment tasks at the beginning when I only worked with Consultants 1 and 2. After I started constructing discourse contexts in French in addition for other consultants, these French versions were mostly also used with Consultant 2. It might be interesting to note at this point that the switch didn't seem to make any difference either for the workflow or for the results.

Unrelated to the choice of the meta-language and the LWC, the judgments provided by Consultant 2 were still sometimes difficult to interpret. Early elicitations with only Consultant 1 and Consultant 2 yielded many inconsistent judgments between the two speakers. In the early stages of elicitation work, it was impossible to tell how the variation between the judgments of the two consultants originated. Subsequently elicited judgments from additional speakers would mostly concur with those given by Consultant 1, and it turned out that the judgments from Consultant 2 systematically differed from those provided by other speakers with regard to certain particular sets of data. A possible reason might be that Consultant 2, as mentioned above, might have had relatively little exposure to Medumba outside of their family of origin and might therefore not be considered a native speaker in the strictest definition.[13] In terms of methodology, this is not supposed to imply that heritage speakers should not be considered as language consultants. It might however provide additional anecdotal support for the already uncontroversial view that elicitation results should be based on judgments from as many speakers as the fieldwork situation allows, and that data which have only been tested with one speaker should be interpreted with great caution.

'Many-on-one' elicitation with Consultant 1 and Consultant 3 Contact with Consultant 3 was mediated by Consultant 1 and the two consultants were acquainted with each other. Moreover, English was not available as an LWC or meta-language with Consultant 3. In this case, elicitation took place in 'many-on-one' interviews. Sometimes these elicitation sessions would only involve the fieldworker, Consultant 1 and Consultant 3. On other occasions, one or two of the consultants' relatives or friends would join the session as per their request. The main advantage of this setting was that Consultant 3 apparently felt more comfortable in group elicitation. Moreover, any potential language barrier between the fieldwork agents could be overcome in these settings. The main language, used both as the LWC and the meta-language, was French, which everybody could understand without problems. Occasionally, I would provide an explanation in English and Consultant 1 would translate it for the other consultant(s). Often these translations and the following exchanges between the consultants would be in Medumba rather than French, however. This created a truly multilingual elicitation setting which gave me the opportunity to record additional spontaneous, un-

---

[13] Such a definition is stated e.g. by Ballmer (1981:59), who holds that bilingual/multilingual speakers in general are "not fully endowed with the abilities of a native speaker". Due to the pervasive multilingualism in this speaker community, the notion of a native language is indeed somewhat hard to grasp. An individual might grow up in a multilingual family outside of the Medumba speaking area, with only one parent speaking Medumba, and they will learn the language natively from that parent. However, the input of the language might be largely restricted to conversation with that parent and (occasionally) other family members, and will involve a lot of code-switching if the parents' common language is French. How this affects the speaker's linguistic competence is a complex (though relevant) issue beyond the scope of this paper. For relevant discussion see e.g. Benmamoun, Montrul, and Polinsky (2013) as well as the commentaries and replies in the same volume.

elicited utterances in the object language. For the 'many-on-one' elicitations to be successful, I found it useful to elicit all judgments from Consultant 1 beforehand and make an agreement that I would not ask for their judgment again in the 'many-on-one' elicitation, in order to prevent any influence on the other consultants' judgments.

'One-on-one' elicitation with Consultant 4   Contact with Consultant 4 was established independently of the other consultants and the fieldwork was conducted later. As noted above, Consultant 4 is a fluent speaker not only of French and English but also of German, so that a third potential meta-language/LWC was available in this case. Here the choice of languages was guided by practical considerations. Since the work took place in Germany, German was a natural choice for the LWC. The fact that both fieldwork agents were fluent in German presented the opportunity to also bring a third meta-language into the picture. However, I decided to use English as a meta-language instead, for the following reason: one major purpose of the work with Consultant 4 was to replicate certain judgments from the other consultants and complement them with follow-up elicitations. On the practical side, this meant that some materials from earlier sessions could be used and did not have to be translated into German. On the methodological side, I aimed at maximal comparability of the data. Although the elicitations in Yaounde suggested that the choice between French and English as meta-languages did not affect the results, this would have been difficult to ensure in this case. More specifically, had I used only German as the meta-language with only one consultant, I wouldn't have been able to exclude that any variation between the judgments from this consultant and the others' was due to the use of different meta-languages (however unlikely that may be). To conclude the remarks on the choice of languages, Table 2 shows a summary of the meta-languages and LWCs that I used in working with each individual consultant.

Table 2: Meta-languages and LWCs

	Meta-language(s)	Language(s) of wider communication
Consultant 1	English	English
Consultant 2	French, English	French, (English)
Consultant 3	French	French
Consultant 4	English	German

2.3.2   Methodological considerations – Finding the right variation

Having discussed the practicalities of choosing meta-languages and LWCs in the described multilingual fieldwork settings, this subsection examines some concrete examples of data elicited with different meta-languages. Let me start by resuming a point that was made in the introduction, with reference to Matthewson (2004) and AnderBois and Henderson (2015): for the investigation of certain empirical phenomena, methodological considerations may speak against presenting contexts in the object language. I presented contexts in the object language on a few occasions, but quickly decided against this option for the exact reason that AnderBois and Henderson (2015) invoke. In fact, the authors explicitly mention investigation of temporal remoteness systems (as reported in Cable 2013) as an example of an empirical domain where the use of the object language for context description seems problematic, since the forms under investigation might have to be used in the

context itself, thus potentially biasing the judgments on the target sentence. Let me give a simple example from Medumba. Recall from Section 2.1 that past remoteness markers in the language can co-occur with time of day markers (see ex. 6). They don't have to, however. Although the use of a remoteness marker with a time of day marker seems to always be possible, time of day markers can also occur without a remoteness morpheme if the eventuality is temporally located in the near past. This is illustrated in example (9).

(9) Context: Elise voudrait rendre visite à Marie. La soeur de Marie explique que ce n'est pas possible parce que Marie est allée á Douala ce matin:
[Elise would like to visit Marie. Marie's sister explains that this isn't possible since Marie went to Douala this morning:]
Marie cág (ya)   nɛnɛ ŋkʉbdjʉ
Marie morn already go   morning
'Marie already went in the morning.'

Consider now the example in (10), which was constructed to investigate the behavior of time of day markers in temporal sequences. The consultants were asked to judge the acceptability of the sentence in (10b) as an answer to (10a). Note that the context question in (10a) contains the near past marker *fə*.

(10) a. Context question: Ákə zə Céline fə   gɣʉ́ ə́?
what that Celine npst do   prt
'What did Céline do?'

   b. (#)Céline cág   nɛ́n ŋwa'ni (mbə) á   yɔg nɛ́n ntɑn
Céline morn go   school then   she aftn go   market
Intended: 'Céline went to school (in the morning) and then she went to the market (in the afternoon).'

Out of the four consultants presented with this example, one accepted (10b), one judged it as slightly odd, and two rejected it, commenting that the *fə*-marker is needed in the answer as well. Not only are these judgments inconclusive, they also do not tell us much about whether the time of day markers in (10b) allow for the sequential use intended in the example. Hence, this would appear to be a case where the use of a tense marker in the context interfered with the consultants' judgments in a way that makes these judgments difficult to interpret. Do the speakers insist on the use of *fə* just because it occurs in the context question, or is there a more general restriction against the use of the time of day markers that shows up in this example for a different reason? Given that speakers generally showed some variation with respect to their tolerance and interpretation of temporally unmarked clauses, the use of Medumba for presenting discourse context might thus produce some additional noise in the data.

This said, however, I concur with AnderBois and Henderson (2015) when they propose that the use of the object language for presenting linguistic context might be preferable in some cases, too. Another simple example from Medumba is given in (11). In order to shed light on the syntactic and semantic status of the temporal markers as opposed to adverbials, the intention was to elicit whether either of them can be used as a fragment answer to a *when*-question. Since fragment answers are a rather colloquial phenomenon (and since acceptability judgments on subsentential elements

are potentially problematic in general, see Matthewson 2004), I opted for context questions in the object language, such as (11a), in order to make this minimal discourse as natural as possible.[14] The consultants' judgments revealed that the temporal markers differ from temporal adverbials in being unacceptable as fragment answers; see (11b) vs. (11c).

(11) a. Marie ntəm nsi   á sɨ?   c. ŋkʉbdjʉ
          Marie fall   down when   morning
          'When did Marie fall?'   'in the morning'

      b. #cág
          morn
          Intended: 'in the morning'

Thus, in line with the argument made by AnderBois and Henderson (2015), purely methodological factors may sometimes favor the use of the object language or else a meta-language for the presentation of linguistic contexts. Since for most of my research questions methodological considerations suggested the use of a meta-language, as well as for practical reasons, context questions and descriptions were mostly presented in English and/or French.

Especially in the early, more exploratory stages of the investigation, using both French and English as meta-languages actually proved somewhat useful. At the beginning, various contexts with different temporal and aspectual restrictions were paired with unmarked temporal clauses as well as with sentences with different tense/aspect markers in order to delimit the interpretative possibilities of the constructions and make progress towards a comprehensive analysis of the temporal and aspectual system of the language. In particular, the fact that French and English display some differences in the aspectual domain[15] in some instances informed the investigation and helped identify the most plausible semantics of the relevant temporal elements in the following ways: on the one hand, variation in the consultants' judgments might be cleared up by presenting contexts in both English and French, thanks to the variation that was introduced by the respective meta-languages. On the other hand, lack of variation in the judgments despite the variation introduced by different meta-languages could strengthen confidence in the validity of the object language data. Once more, let me illustrate both points with a simple example.

Recall from Section 2.1 that Medumba in principle allows for finite clauses without any overt temporal or aspectual marking (ex. 8), and that the tense/aspect system includes the markers *kə́* and *cwɛd* that occur in imperfective clauses (ex. 7). One research goal was to find out what kind of temporal and aspectual interpretations are available for temporally unmarked clauses, and another one was to investigate the distribution and the exact meaning of the aspect markers of the language.

---

[14] A reviewer legitimately asks whether switching between languages in a question-answer pair wouldn't be just as natural for multilingual speakers. There is perhaps no general answer to this question, as code-switching arguably depends on a variety of individual and situational factors (see e.g. Gardner-Chloros 2009 for an overview). As regards the specific example in (11), a relevant theoretical background assumption is that a fragment answer is an elliptical ('sluicing') construction derived from a full clause such as *Marie fell in the morning* (see Mucha 2017:10 for details). Under this view, speakers must initially construct the full Medumba sentence to then derive the fragment answer. Conceivably, this could be complicated by the context question being presented in French or English.

[15] For description and discussion of differences between the tense/aspect systems of English and French see, e.g., Michaelis (2006) and Verkuyl, Vet, Borillo, Bras, Le Draoulec, Molendijk, de Swart, Vetters, and Vieu (2004), respectively.

For a first approximation, the consultants were presented with simple question-answer pairs such as (12). In this example, the context was a simple present tense question in French. The consultants were asked to judge the acceptability of the Medumba bare event sentence in (12a) as an answer to this question. The judgments for minimal examples of this kind were mixed. Out of the four consultants who were presented with (12a), two rejected it, one accepted it, and one reported that they did not have a strong intuition. They volunteered a corrected version containing the *kə́*-marker; see (12b).

(12)   Context question (French): Que font les enfants? (lit. 'What do the children do'?)

     a. #/?bú   mbǔ'ə sá
         they play   music
         Intended: 'They are making music.'

     b.   bú   kə́   mbǔ'ə sá
         they ipfv play   music
         'They are making music.'

    Simple present in French as in the context question in (12) does not involve any transparent aspectual marking, but will most naturally have an imperfective interpretation. This suggests that in the answer the *kə́*-marker is inserted to mark imperfectivity, and that an imperfective interpretation is at least strongly dispreferred for an unmarked sentence such as (12a).

    However, simple present tense in French is compatible with progressive as well as habitual interpretations, so our insight with respect to the distribution of *kə́* is limited. Moreover, the one consultant who accepted the unmarked sentence in (12a) quite consistently rejected *kə́* in minimal discourses of this kind. This inter-speaker variation is puzzling, but some insight could be gained from comparable question-answer pairs with English used for the context questions. Since simple present tense in English is not compatible with episodic readings, we are pressured to disambiguate the intended reading when using English as a meta-language, for instance by using the present progressive as in (13). This example (presented to Consultant 4) was judged as unacceptable and elicited a different correction, namely marking with the morpheme *cwɛd*. Notably, a version of (12a) with *cwɛd* was also accepted by all consultants who were presented with the French simple present context.

(13)   Context question (Eng): What is Nana doing?
     #Nana ná   cəŋ
       Nana cook food
       Intended: 'Nana is cooking.'

    For explicitness, the examples in (14) and (15) illustrate that aspectual marking with *cwɛd* is felicitous in answers to both simple present questions in French and present progressive questions in English.

(14)   Context question: Que font les enfants?   (French simple present)
      bú   cwɛd nzi
      they ipfv   sleep
      'They are sleeping.'

(15) <u>Context question</u>: What is Patrick doing?   (English present progressive)
    Patrick cwɛd nzi
    Patrick ipfv sleep
    'Patrick is sleeping.'

The generalization that would eventually emerge is that *cwɛd* is a present progressive marker, incompatible both with non-present and habitual readings. The morpheme *kə́*, by contrast, was ultimately analyzed as a general imperfective marker, which is however dispreferred (by some speakers) in contexts where a more specific temporal marker such as *cwɛd* is available (see Mucha 2015:ch.6 for details). Plain eventive sentences such as (12a) or (13) can only get a perfective interpretation in Medumba. Imperfectivity must be overtly marked in eventive clauses, and Medumba has several morphemes for this purpose encoding (present) progressive, (present) habitual or more generally imperfective meaning. The mixed judgments elicited in (12) presumably came about because the (admittedly extremely simple) context question did not specify which of these interpretations was intended.

I would like to note that the examples given above are mainly intended for illustration. Of course, discourse contexts will typically be more complex and thus contain more relevant grammatical information, and of course subtle semantic distinctions such as that between imperfective and progressive aspect meanings can be made explicit in French as well. In the end, the mix of meta-languages and LWCs in the fieldwork reported here was employed first and foremost out of necessity and not deliberately chosen for methodological reasons. The point to be made with the examples above is that parallel elicitation with several meta-languages in this particular case could give a first hint at how labor is divided in the aspectual domain in Medumba. On a more general note I would like to state, perhaps uncontroversially, that mixing meta-languages and LWCs is unproblematic methodologically and might even be advantageous as it prompts the fieldworker to reflect even more thoroughly on whether and how certain properties of the meta-language could potentially influence the consultants' judgments. In light of Pasquereau (2020)'s questions about how to distinguish random and meaningful variation and how much replication we need in our data (see question 3 in Section 2), the use of several meta-languages can be useful in at least two ways. Firstly, it can help us identify variation in the data that is due to the elicitation technique itself or to certain properties of the meta-language. A little more pointedly: if the consultants' answers are inconclusive, we might have asked the wrong question. If a certain context is not perfectly fit to elicit judgments on the phenomenon that the fieldworker aims to investigate, conducting a comparable elicitation with another meta-language might help identify the problem or elucidate the source of the variation in the judgments. Secondly, given that fieldwork techniques and particular contexts designed to investigate a linguistic phenomenon should be replicable across languages, multilingual elicitation is useful in that it can ensure this replicability at least across the employed meta-languages. To conclude this research report, the main lessons drawn from my individual research practice are summarized in the final section.

3 Conclusion

This paper provided an individual research report with a focus on the use of different languages for presenting discourse contexts and for communication with the consultants in a multilingual fieldwork setting. The experience I gathered in my fieldwork concurs with many remarks and suggestions

that have been made in the literature before. A lesson that becomes abundantly clear to a field-worker who needs to switch between meta-languages and LWCs is the premise that the discussion started from: elicitation mediated by a language other than the language of investigation is not in itself methodologically problematic, but the fieldworker still needs to be alert to any potential biases that could be introduced by presenting linguistic material in a meta-language, or even in the object language. As noted above, this argument was made very explicitly by AnderBois and Henderson (2015). Not only do they argue that the use of a meta-language for presenting discourse contexts can be conducive to the success of data elicitation in some cases and obstructive in others, they also provide the reader with specific take-home messages, see (16).

(16) **Best practices for linguistically establishing discourse contexts in judgment tasks:**
(AnderBois and Henderson 2015:229)
a. Researchers should disclose what language was used to establish the discourse context.

b. Researchers should disclose the reasons why a given language was chosen, especially when these reasons are purely linguistic in nature.

It seems that these proposals have not yet found their way into common practice of reporting fieldwork results (this includes the author's own research referred to in this paper!), so it might be worthwhile repeating them here. AnderBois and Henderson (2015) make the point that the decision of which language to use for presenting discourse contexts in judgment tasks is an integral part of the fieldwork methodology and should be reported as such. Adding to this general methodological point, this paper focused on a scenario where the choice of the meta-language and the LWC is not an obvious one, because the fieldworker shares several languages with the consultants, which are mastered by the fieldwork agents to varying degrees. In such a situation, the fieldworker is faced with the challenge of finding the language that makes communication between the fieldwork agents as efficient but also as enjoyable as possible, for each consultant individually. I reported my own experiences in using different meta-languages and LWCs, trying to meet this goal. Concluding this paper, (17)–(19) summarize some insights gained from this particular practice which I hope can be of interest to other fieldworkers as well.

(17) **Accommodating the consultants' preferences**
In the choice of a meta-language and an LWC (just like in any other social aspect of field-work), researchers should prioritize the consultant's preferences and comfort. 'Many-on-one' elicitation settings can be conducive to this if the fieldworker and a particular consultant do not match perfectly in their language proficiencies.

(18) **Mixing the meta-language and the LWC**
Depending on the language proficiency and preferences of the fieldwork agents, different languages can be used for presenting contexts and other linguistic material (i.e., as 'meta-language') and for oral communication (as 'LWC'). In this case as well, 'many-on-one' elicitation can be helpful, e.g. when a consultant prefers to discuss examples in the object language.

(19) **Mixing meta-languages**
The use of different meta-languages can help to identify or rule out any potential bias in the object language data, if comparable data with different meta-languages can be generated. The use of different languages for presenting contexts can be advantageous as it prompts the fieldworker to reflect on any possible impact of the meta-language.

References

AnderBois, Scott. 2016. Semantics and pragmatics of (not-)at-issueness in Yucatec Maya attitude reports. *Semantics and Pragmatics* 9:1–55.

AnderBois, Scott, and Robert Henderson. 2015. Linguistically establishing discourse context: Two case studies from Mayan languages. In *Methodologies in semantic fieldwork*, ed. M. Ryan Bochnak and Lisa Matthewson, 207–232. Oxford: Oxford University Press.

Ballmer, Th. T. 1981. A typology of native speakers. In *A festschrift for native speaker*, ed. Florian Coulmas, 51–67. The Hague: Mouton.

Benmamoun, Elabbas, Silvina Montrul, and Maria Polinsky. 2013. Heritage languages and their speakers: Opportunities and challenges for linguistics. *Theoretical Linguistics* 39:129–181.

Bochnak, M. Ryan, and Lisa Matthewson. 2020. Techniques in complex semantic fieldwork. *Annual Review of Linguistics* 6:261–283.

Cable, Seth. 2013. Beyond the past, present, and future: towards the semantics of 'graded tense' in Gĩkũyũ. *Natural Language Semantics* 21:219–276.

Cable, Seth. 2020. A few reflections on methodological matters, prompted by Pasquereau (2020). Paper presented at the Roundtable on Semantic Fieldwork Methodology, Sinn und Bedeutung 25, UCL & QMUL, 2 September.

Danis, Nick, Jonathan Barnes, and Catherine O'Connor. 2012. Downstep and Contour Formation in Medumba. In *Proceedings of the 42nd Annual Conference on African Linguistics (ACAL)*, 23–31.

Franich, Kathryn, Catherine O'Connor, and Jonathan Barnes. 2012. Tonal Merger in Medumba (Bamileke) Nouns. In *Proceedings of the 42nd Annual Conference on African Linguistics (ACAL)*, 32–46.

Gardner-Chloros, Penelope. 2009. Sociolinguistic factors in code-switching. In *The Cambridge handbook of linguistic code-switching*, ed. Barbara E. Bullock and Almeida Jacqueline Toribio. Cambridge, UK: Cambridge University Press.

Grenoble, Lenore, and Lindsay Whaley. 2006. *Saving languages: An introduction to language revitalization*. New York: Cambridge University Press.

Harris, Zelig S., and C. F. Voegelin. 1953. Eliciting in linguistics. *Southwestern Journal of Anthropology* 9:59–75.

Hayashi, Midori. 2011. The structure of multiple tenses in Inuktitut. Doctoral Dissertation, University of Toronto.

Hayashi, Midori, and David Oshima. 2015. How multiple past tenses divide the labor: The case of South Baffin Inuktitut. *Linguistics* 53:773–808.

Keupdjio, Hermann Sidoine. 2020. The syntax of A'-dependencies in Bamileke-Medumba. Doctoral Dissertation, University of British Columbia.

Klecha, Peter, and M. Ryan Bochnak. 2016. Temporal remoteness and relativity. In *Proceedings of North-East Linguistic Society (NELS) 46*, ed. Christopher Hammery and Brandon Prickett, volume 2, 213–226.

Kouankem, Constantine. 2012. The syntax of the Medumba determiner phrase. Doctoral Dissertation, Université de Yaoundé I.

Matthewson, Lisa. 2004. On the methodology of semantic fieldwork. *International Journal of American Linguistics* 70:369–415.

Matthewson, Lisa. 2011. Methods in cross-linguistic semantics. In *Semantics: An international handbook of natural language meaning*, ed. Klaus von Heusinger, Claudia Maienborn, and Paul Portner, 268–285. Berlin, New York: Mouton De Gruyter.

Michaelis, Laura A. 2006. Tense in English. In *The handbook of English linguistics*, ed. Bas Aarts and April McMahon, 220–243. Oxford, UK: Blackwell.

Mucha, Anne. 2015. Temporal interpretation and cross-linguistic variation: A formal semantic analysis of temporal and aspectual reference in Hausa and Medumba. Doctoral Dissertation, Universität Potsdam.

Mucha, Anne. 2017. Past interpretation and graded tense in Medumba. *Natural Language Semantics* 25:1–52.

Nganmou, Alise. 1991. Modalité verbales. Temps, aspect et mode en Medumba. Doctoral Dissertation, Université de Yaoundé I.

Pasquereau, Jérémy. 2020. Semantic elicitation in the field: From finding consultants to interpreting results. Paper presented at the Roundtable on Semantic Fieldwork Methodology, Sinn und Bedeutung 25, UCL & QMUL, 2 September.

Rice, Keren. 2012. Ethical issues in linguistic fieldwork. In *The Oxford handbook of linguistic fieldwork*, ed. Nick Thieberger, 407–429. Oxford: Oxford University Press.

Roberts, Craige. 2012. Information structure in discourse: Towards an integrated formal theory of pragmatics. *Semantics and Pragmatics* 5:1–69.

Simons, Gary F., and Charles D. Fennig. 2017. *Ethnologue: Languages of Africa and Europe*. Dallas, Texas: SIL International, 20th edition.

Sosso, Dorine. 2020. Equality beyond translation: Societal bilingualism in Cameroon. Doctoral Dissertation, University of Ottawa.

Vaux, Bert, and Justin Cooper. 1999. *Introduction to linguistic field methods*, volume 1. Lincom Europa.

Verkuyl, Henk, Co Vet, Andrée Borillo, Myriam Bras, Anne Le Draoulec, Arie Molendijk, Henriëtte de Swart, Carl Vetters, and Laure Vieu. 2004. Tense and aspect in sentences. In *Handbook of French semantics*, 233–270. Stanford, CA: CSLI Publications.

Voorhoeve, Jan. 1965. The structure of the morpheme in Bamileke (Bangangté dialect). *Lingua* 13:319–334.