

Integrating Documentation and Formal Teaching of Kari'nja: Documentary Materials as Pedagogical Materials

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In response to the loss of more traditional modes of transmission and decreased contexts of use, members of many endangered language communities have begun revitalization programs that include formal teaching. Linguistic documentation of these languages often occurs independently of revitalization efforts and is largely led by outsider academics. Separation of documentation and revitalization is unnecessary. In fact, the two endeavors can readily support and strengthen each other. This paper describes the process of concurrently creating formal teaching materials and a documentary corpus of Kari'nja, an endangered Cariban language of Suriname. Activities described embody the Community Partnerships Model (CPM), a methodological approach to linguistic fieldwork that is collaborative and speech community-based. The work described herein represents a small portion of an ongoing documentation, description, and revitalization program.

1. INTRODUCTION. A little cartoon came across my desk a couple of years ago. In it, a group of people is lamenting the loss of their language. "Our language is dying!" they cry. "Who will help us save our language?" Enter the masked superhero. "I'm here!" he announces, fist to his hip and eyes pointed skyward. "Yay!" shout the people. "Are you here to save our language?" "Yes!" he announces with authority. "Let's get to work! The first

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thing we need to do is figure out the case marking system. Is that ergative or nominative alignment?"²

Linguists working to document endangered languages are frequently represented as caped crusaders, tasked with saving the world's languages before it is "too late." Speech community members are portrayed as helpless, impotent victims of circumstance. The reality, as portrayed in this cartoon, is that linguists are often primarily interested in academic topics that are tangential (at best) to revitalization. The actuality outside the cartoon is that speech community members are neither helpless nor impotent. They have a direct interest in research into their languages, and they can be excellent collaborators for both documentation and revitalization.

Unfortunately, for most linguistic fieldworkers, time devoted to preservation or revitalization is second-shift work. That is, work that can be done only after the more pressing work of documentation and academic description is finished. That this work is often more pressing only to the academic has not escaped the notice of speech community members interested in revitalizing their heritage languages. Savvy communities are demanding that documentation and description directly address their needs as language activists. Already taxed linguists are left to choose between pursuing the goals of the speech community or their own goals as academics. In many cases, academic goals take precedence. The extra time and energy required by applied revitalization-focused work affords few rewards in academia beyond good feelings. There is little funding, there are few publication venues, and publication of a set of lessons does not count toward a tenure review. The pressure to "publish or perish" often outweighs an honest desire to help speech community members to address their needs; even motivated speech community members have little leverage to compel cooperation by an academic linguist.

There are linguists who have managed to incorporate revitalization-focused work within their academic careers, most in cooperation with speech community members. Axelrod (2010), Czaykowska-Higgins (2009), Stebbins (2003), and Penfield, et al. (2008) all describe community-oriented projects that include revitalization components. There is a small but growing literature that emphasizes the value of community-responsive and revitalization-focused academic work (c.f. Dwyer 2006; Furbee & Stanley 2002; Florey 2009; Grenoble & Whaley 2006, among others). This paper is motivated by my desire for us, as academic linguists, to work together to find new ways of doing it all. This motivation has guided my work with the Aretyry Kari'nja speaking community of Konomerume. Speech community members and I have been working to document, describe, and revitalize their dialect of Kari'nja. We approach documentation and revitalization as concurrent, complementary activities of equal importance. Community ownership of and participation in all projects means we all have a voice in this work.

This paper also represents a step toward further elaborating the academic value of pedagogical work in service of speech community goals. The particular part of our ongoing work that I describe here is the process of creating pedagogical materials for formal teaching concurrently with documentation. The greater focus in this paper is on pedagogy and the sorts of questions that we ask ourselves along the way. It represents a small portion of a much greater project. Formal teaching of Kari'nja is only one component of a larger

² The cartoon had been copied from an unknown source.

revitalization effort. I hope the example here will inspire other documentary linguists to describe their own second-shift activities in endangered language work—be they in the areas of revitalization, formal teaching, or elsewhere. Perhaps we—outsider academics and speech community members alike—can support each other in finding new ways of addressing the needs of all members of a documentation endeavor in addition to recognizing the academic merit of applied work.

1.1 DEMOGRAPHICS. In 2005, I began a collaborative language documentation project with members of the Aretyry dialect-speaking community of Konomerume (also known as Donderskamp). I had lived in the community for three years as a Peace Corps Volunteer starting in 1995, and had maintained long-distance friendships with community members in the intervening years. Aretyry, a dialect of the Cariban language Kari'nja,³ is spoken in western Suriname and eastern Guyana. Known to outsiders as Murato (a term that speakers consider pejorative), Aretyry is one of two dialects identified in Suriname. Tyrewuju, the prestige dialect, is spoken in the eastern part of the country. There are an estimated 7,430 Kari'nja speakers worldwide (Lewis 2009), but only a small percentage of those speaks the Aretyry dialect.

In Konomerume, there are four groups of speakers roughly delimited along age lines. Native speaking elders aged 65 and above are fully fluent and still use Kari'nja daily as their primary language of communication among themselves. Middle-aged speakers range in age from 40 to 65 years old. They are native speakers who no longer use the language daily, and are thus less fluent than elders. Many younger adults aged 20 to 40 understand the language, but are not fluent speakers. Currently, children are not acquiring the language natively, and most understand only a few words.

Konomerume represents the geographic and social border between the two languages that are native to the Wajambo region. The community to the east, Corneliskondre, is Kari'nja, and that to the west, Tapuripa, is Lokono (Arawak). Konomerume was originally two villages—one Lokono and one Kari'nja. Intermarriage eventually led to the merger of the two communities. Most residents who claim Lokono heritage are not fluent in the language. Of the two indigenous languages, Kari'nja is dominant.

Members of the current generation of elders were children when the Catholic Church opened a primary school in the community. The languages of instruction were Dutch, the official language of the country, and Sranan Tongo, the national *lingua franca*. Children were forbidden from speaking their native language on school grounds. This was the first major step in language shift, and subsequent generations were raised in Sranan Tongo or Dutch.

Currently, most children acquire Sranan Tongo as a native language and are taught Dutch through sink-or-swim submersion at school. In most households with school-aged children, adults speak Sranan Tongo with one another and sometimes Dutch with children. The community is at Stage 7 of Fishman's (1991:87–111) Graded Intergenerational Disruption Scale (GIDS). Elders still speak Kari'nja among themselves, middle-aged adults

³ Kari'nja is usually referred to in the literature as Carib of Suriname or simply Carib. I use speakers' autodesignation throughout.

speak the language with elder parents, young adults understand but don't speak the language, and very few children are addressed in the language. The gap between speakers exists between the middle-aged and young adult generations. Community members who are literate, including almost all members of the middle-aged and young adult groups, are literate in Dutch and Sranan Tongo. As we develop materials, young adults and children are acquiring Kari'nja literacy as a means of supporting their language learning. In addition, literate elders who have been participating in documentation are becoming literate in Kari'nja as they work to transcribe and translate text data. The dearth of written materials in Kari'nja means that literacy in the language is unlikely to be used for leisure reading over the short term. However, there has been talk of publishing a community newsletter in Kari'nja, so literacy objectives may evolve.

1.2 FIELDWORK METHODOLOGY. In 1992, Language published a group of short essays on endangered languages and responsible linguistics (Hale et al. 1992). In it, several prominent linguists called for responses to language endangerment that include collaboration with speech communities and local ownership of projects. Since then, the field of language documentation as a unique endeavor has taken shape. The calls for speech community involvement of 15 years ago have become today's calls for approaches that better address speech community issues. According to Nathan & Fang, "documentation as it is currently practiced mainly serves the purposes of descriptive and typological linguists" (2008:177). For example, many researchers begin their documentation by recording traditional stories. While this is an important genre from a cultural perspective, it does little to support revitalization of language as it is actually spoken on a day-to-day basis. I am acquainted with one speech community linguist who is working to revitalize her sleeping heritage language using an academic linguist's texts and recordings. While she is grateful for their existence, she wishes there had been more functionally useful language recorded. "I would like to be able to say 'good morning' in my language, but can't find that in the texts," she has said (Marnie Atkins, p.c.).

This paper seeks to bridge the gap between outsider academic linguists and insider speech community linguists⁴ by describing a process of documentation that directly serves revitalization needs as articulated by language speakers—in this case, supporting language revitalization with materials for formal teaching. This paper pays greater attention to pedagogical issues than to documentary ones, as there is a greater dearth in the literature with regard to endangered language pedagogy than there is with regard to documentation methods. Nonetheless, the focus is on pedagogy that is directly supported by documentation.

⁴ A note on terminology: I use "academic linguist" and "speech community linguist" to distinguish between those who work with indigenous languages based on their status as outsiders or insiders to the speech community. However, I recognize that this line is blurring as more members of Indigenous communities become academic linguists who work on their own heritage languages. One may simultaneously be a member of both the academic and speech communities. I have heard a variety of terms used in reference to speech community members including "subject," "consultant," "language activist," or "teacher." I advocate an approach whereby speech community linguists and academic linguists work together early in a partnership to negotiate appropriate mutual terms of address.

In this case, collaboration includes planning documentation that supports community revitalization goals. Rather than create pedagogical materials after-the-fact in the absence of community input as a means of "giving back to the community" (Nathan & Fang 2008:178), community members and I have worked together to create documentation that is readily available to teachers and learners. This has been as simple as including reverse look-ups in each of the two dominant languages (Sranan Tongo and Dutch) in print copies of the lexical database⁵, and as complicated as printing screen captures from documentation videos to be used as "Talking Cards" (Beavert et al. 2005).

Early in our collaboration, community members expressed interest in beginning a formal teaching program as part of a greater revitalization effort. This effort includes activities described in Yamada 2007, including a language club and creating community signage in Kari'nja, as well as increasing Kari'nja visibility in the greater region by providing training for other communities (c.f. Yamada 2010). The materials we have created support various revitalization, documentation, and descriptive goals beyond formal teaching. However, my primary focus in this article is on documentation in support of formal teaching. In Yamada 2007 and 2010, I describe the greater breadth of our work in more detail. Our work together embodies the Community Partnerships Model (CPM) of linguistic fieldwork (Yamada 2010). All work is ongoing, collaborative, mutually determined, and mutually beneficial. Community members and I work together as partners, each contributing unique knowledge and expertise.⁶

1.3 TERMINOLOGY. *Documentation* refers, in the sense of Himmelmann, to the creation of a "lasting, multipurpose record of a language" (2006:1). Any documentary corpus is, by its very nature, reductionist. That is, it attempts to represent the vast richness of a language with only the small pieces that are practical to record. In order to serve varied planned and unforeseen needs, a good corpus records a variety of types of language in context-rich situations. By the methodological fieldwork framework espoused here, speech community linguists are instrumental in determining appropriate content for documentation.

I use the term *revitalization* in the broad sense of Hinton (2001:5) to refer to the variety of activities undertaken by members of communities to keep their languages, which are endangered or sleeping, alive. I have heard it used (usually by non-practitioners) as a

⁵ As one reviewer has pointed out, reverse look-ups may cause frustration in that they require that the learner search for each word twice—once from Sranan Tongo to Kari'nja to find the individual lexeme, and then again in the Kari'nja to Sranan Tongo section to find the full entry. An additional problem is the representation of morphological complexity. For example, a complex word like *py'to* 'give wife' would be listed alphabetically in the reverse look-up under "give" rather than "wife." Regarding the former problem, we take the point of view that a reverse look-up that requires an extra step is better than nothing. The latter problem we address by, for example, manually adding an additional entry under "wife" for *py'to*. This solution creates the additional problem of multiple entries per word (with the more common words including an unwieldly number of entries). We have yet to develop a fully workable solution to either problem, but have not yet given up hope of finding one.

⁶ C.f. Florey 2009, Penfield et al. 2008, and Czaykowska-Higgins 2009, among others, for additional examples of community-responsive fieldwork models.

cover term for formal teaching of an endangered language, but this is not the sense in which I use it here. Revitalization includes expanding contexts of use of a threatened language, creating new speakers, as well as increasing the proportion of time spent in the language by current speakers. Often, in situations of endangerment, contexts of use of the language have been diminished such that the language may be used only in formal ceremonial contexts. Through revitalization, a language may again be used in contexts where it had been replaced by another more dominant language. For example, in the Wajambo region, sports tournaments among communities are common. In the 1950s, Kari'nja was the primary language spoken among both players and fans. Now, one hears Sranan Tongo almost exclusively. Revitalization of Kari'nja in this context would include a return to its use on the playing field and in the stands.

In addition to reclaiming previously used contexts, the endangered language may be used in new contexts where it was never used before—the classroom often being one of these. In Konomerume, other new contexts would include the church-run medical clinic as well as Catholic Church services. While activities such as formal teaching can support revitalization, they cannot be the whole story. My focus in this paper is on development of materials in support of formal teaching. However, this is only a subset of the ongoing revitalization activities in Konomerume and the Wajambo region.

When documentation and support of revitalization are viewed as separate enterprises, language resources must be mobilized. According to Nathan, mobilization of language documentation "means taking linguistic documentation and working with speaker communities and other specialists to deliver products that can be used to counter language endangerment" (2006:364). This could include, for example, breaking documentary videos and accompanying texts into smaller segments that could then be used as either formal or informal teaching tools. When documentation and support of revitalization are approached as complementary, concurrent activities, mobilization is a given rather than a separate activity. The documentary corpus is created both as an archive of particular aspects of the language in use, and as a resource for preservation and revitalization. When decisions about how the corpus will be used for preservation are made at the outset of documentation, the goals of preservation inform what and how to document. In addition, materials created in support of revitalization add to the documentary corpus.

2. PLANNING. Early in the documentation process, village leaders decided revitalization should accompany documentation. This has included attempts to increase the status of the language in the community, encouraging middle-aged speakers to use the language more often, expanding use of the language in formal contexts such as ceremonies and meetings, and creating signs in Kari'nja. For example, encouragement from elders led one group of adult sisters to independently implement a Kari'nja Language Hour when their neighborhood would be "Kari'nja Only" for a set daily period of time (c.f. Yamada 2007). In addition, leaders decided to implement a formal teaching program⁷ to include elementary school lessons and an adult school course, as the language was no longer being transmitted at home. However, there were no available pedagogical materials for their

⁷ I make a distinction between formal and informal teaching. Formal teaching usually occurs in organized settings such as classrooms or community centers, while informal teaching tends to occur in more "naturalistic" settings such as the home or riverside. Both are important to revitalization.

dialect of Kari'nja, and existing academic descriptions were of no use as all were written in languages not spoken in Suriname. In response, a team of local teachers, native speaking elders, village leaders, and I held a series of meetings to decide how documentation could address revitalization needs.

The products described in this paper represent only a small portion of a long-term documentation, description, and revitalization project. There is a time depth to this work that may not be adequately reflected in the small portion described here. Our ongoing work, which exemplifies the Community Partnerships Model (CPM) described in Yamada 2010, draws heavily on sustainable community development approaches that depend on community participation. Community members take on roles and responsibilities more traditionally fulfilled by outsider academics. Our planning and development meetings are done in a workshop format facilitated by different members. A consensus model guides our decision-making and we are usually able to compromise when we disagree. However, we have also abandoned projects when we could not achieve consensus.

Members of different community groups have participated in different workshops depending on need. For example, one dictionary editing workshop included elder speaker-teachers, young adult teacher-learners, and adult learners. Our process, though time-consuming, is rewarded by greater community participation in and ownership of projects. In addition, the time spent in workshops pays dividends in terms of greater distribution of the workload.

Since planning for revitalization began during the documentation project, we were in the unique situation of being able to plan documentation with a specific goal of supporting revitalization. Our objective, in planning, was to seek to meet the needs of all major stakeholders in the Kari'nja documentation and revitalization endeavor.

Although different groups of community members have different specific needs, all agree that documentation and revitalization are important. Each of the following groups has played a significant role in our ongoing success: elected village leaders, elder native speakers, middle-aged speaker-teachers, young adult teacher-learners, and adult and child learners. Although they have not participated in formal planning, the children have proved instrumental. More than one young adult learner has said that it's their children who inspire them to speak the language at home and elsewhere rather than using it only during formal lessons.

A driving force behind the documentation, description, and revitalization endeavor, Ferdinand Mandé had been engaged in his own documentation of the language when he and I began our work together. He was chief of the village when we began, and has been instrumental in nurturing community support for our projects. He has been my primary counterpart in the village and is responsible for seeing through projects that we initiate together. In addition, he identifies and contacts potential collaborators for new projects. When he chose to retire from village leadership in 2006, he and I met with newly elected village leaders to ask for their support of our ongoing and planned projects. In addition to enthusiastically authorizing our work, the new chief, Roberto Joghie, has emphasized the importance of maintaining Kari'nja during community meetings by inviting elders to

⁸ With thanks to the reviewer who so aptly commented, "Work like this is a lifetime project: one lifetime per language one takes on."

address meetings in Kari'nja and encouraging young adults to attend the Kari'nja classes. In addition, he served as an actor in one of our locally-produced elicitation videos.

Elder native speakers serve as advisors and community protocols dictate that they be consulted individually as decisions are being made. As projects progress, Chief Mandé meets with elders to keep them informed and to seek their advice. Their voices are heard figuratively in what we choose to document, and literally in our recordings of the language. Although some elders have asked not to be recorded, most are in favor of documentation and revitalization of Kari'nja. Admittedly, there are a few elders who do not understand why we would want to revitalize a language that they have seen fall out of prestige in their lifetimes, but they have nonetheless given us their endorsement. The more typical view, though, is that held by Henriette Alkantara, who is adamant that there be an emphasis on documenting cultural practices also in need of revitalization and on recording and teaching the language that accompanies them. Toward that end, she once prepared for an elicitation session by assembling the various tools for cotton spinning. Amazed at our good fortune, Chief Mandé and I abandoned that day's original plan and recorded her description of spinning instead.

Led by Chief Mandé, the original middle-aged speaker-teacher group included Maria Alkantara and one other teacher described in more detail in section 4.2. This group of three teachers formed the core of the curriculum planning team. In addition, they have participated in workshops in Kari'nja grammar and linguistics, and in methods and materials for second language teaching. When the program was restructured last year, Cecilia Arupa joined this team.

Originally, the young adult teacher-learner group included the full K-5 elementary school staff of seven. This group partnered with the speaker-teachers to develop the materials described here. They also piloted materials in the elementary school. As we continue to refine existing materials and develop new ones, we have worked with a smaller core group of four teachers. This group is led by Sieglien Jubithana (who also heads the technology team), and includes Yvonne Marlbons, Ignatius Mandé, and Regina Chu. All of the teachers are members of the community, and all but one was born and raised in Konomerume. This fortunate situation is a direct result of advocacy by Chief Mandé during his tenure as village chief. Prior to his taking office, the Roman Catholic Church provided teachers, and all came from the capital city of Paramaribo. Teacher attrition was a tremendous problem at that time. Chief Mandé lobbied the church to provide teacher training for motivated individuals from Konomerume who had achieved a specified minimal level of schooling. Since that time, community members have staffed the village school exclusively. Each teacher is at a different level of Kari'nja fluency, ranging from low beginner to high intermediate according to American Council for the Teaching of Foreign Languages (ACTFL) guidelines (ACTFL 1983).

Finally, a group of students from the adult course has been an active part of the materials development process. They have participated in assessment and dictionary editing workshops, providing feedback on materials and teaching methods. Led by three of Chief Joghie's sisters, this group includes one of Chief Mandé's daughters and one of the new assistant chiefs.

When the groups come together, Chief Mandé, teacher-learner Sieglien Jubithana, and I act as workshop facilitators. We have also conducted a regional workshop and

co-presented a paper in French Guiana (Yamada et al. 2008). Each of us takes responsibility for different tasks, but we share leadership roles for various projects. For example, during the regional workshops, each of us took full responsibility for leading the workshop on different days. For our paper presentation, we worked together to decide on the content of the presentation, and then each of us prepared and presented a different aspect individually.

2.1 FORMAL TEACHING. Once we decided that we would be implementing a formal teaching program as a part of the revitalization effort, we had several issues to address. Elder speaker-teachers and younger teacher-learners participated in a series of curriculum planning meetings. However, before we could plan actual curriculum we needed to understand what our needs would be. Questions we asked ourselves specific to formal teaching included:

- Who would students and teachers be?
- How much time would be allotted to instruction?
- What were the goals of formal teaching?
- What would course content be?
- Which teaching approach would best support stated learning objectives?

Each of these issues is discussed in the following sections.

2.1.1 STUDENTS, TEACHERS, AND TIME. We decided to initiate two separate programs: weekly lessons in the community elementary school and an evening course for adults. Elementary school teachers have thirty minutes per week for "flex" lessons, and they decided to start the program by using those instructional minutes in grades K-5 on Kari'nja. We recognized that this was an inadequate amount of time to actually produce new speakers, but we anticipated that children would get additional input outside of class time, both from elder community members and from their parents. The adult course would meet twice per week for one hour and would target parents of the K-5 students. In this way, children and their parents could receive lessons on similar topics to support each other's learning at home. In addition, targeting young adults supports Fishman's (1991) steps toward language expansion to encourage the process of reversing language shift (RLS) in that young adults are well positioned to then transmit the language to their children.

It was important to choose teachers early in our planning because they would have a direct impact on appropriate teaching materials and the types of materials that would be useful. The most fluent elder speakers lack the energy necessary to teach small children and are uncomfortable with technology and materials such as picture cards. They also lack training as teachers or experience as students. The elementary school teachers, members of the young-adult generation, though trained as teachers, are not fluent speakers (and, in some cases, are non-speakers). Members of the middle-aged generation are fluent but rusty speakers, do not have training as teachers, but have had the benefit of much more formal schooling than their parents' generation. However, they are also the most busy group in terms of other family, work, and home commitments. Everyone agreed that the best approach would be one that teamed members of the different generations so that they could share their respective strengths.

The curriculum planning team decided that the elementary school teachers would teach their own weekly Kari'nja lessons. However, each of them agreed to develop an informal Master/Apprentice-type relationship (Hinton 2002) with a community elder. Fortunately, each of them has direct access to such an elder—either a parent or grandparent. Consultation with elders would serve two purposes. First of all, teacher-learners could check their own pronunciation and understanding of lesson content in advance of teaching a particular lesson. This would support teachers who are not fluent speakers themselves and encourage their use of Kari'nja as the primary language of instruction. Secondly, teacher-learners and elder speakers would develop the connections needed to foster intergenerational transmission between the elder and young adult generations, an important component for reversing language shift. Although this is not a strictly Fishman-like (1991) way of closing the gap between young adult and middle-aged or elder speakers, it nonetheless begins rebuilding the interaction necessary between the generations.

Chief Mandé, Maria Alkantara, and one other middle-aged speaker would teach the adult school, and they would divide the work. Two of the elementary school teachers agreed to enroll in the adult course and serve as lesson planning consultants for the speaker-teachers. Thus, there would be three groups responsible for formal teaching of the language: elder speakers would act as language consultants outside of class time for all teachers, and would occasionally visit the classes, as their health and schedules allowed; middle-aged speaker-teachers would teach the adult school course and would consult with elementary school teachers for help with lesson planning; young adult teacher-learners would teach weekly thirty-minute lessons in their own elementary school classes and would consult with elder speakers both to plan lessons and to further their own language development.

2.1.2 GOALS AND CONTENT. Elders suggested, and the team agreed, that cultural practices and the language integral to them comprise an essential part of any formal teaching program. In addition, community members, especially elders, felt that functional fluency in the domains of speaking and listening be given greater emphasis than metalinguistic knowledge or literacy. Reading and writing would be introduced insofar as they support speaking goals, but the primary emphasis at all levels would be on communicative competence in the domain of speaking. *Communicative competence*, here, refers to the ability to negotiate communicative events within the social and cultural context of the community (c.f. section 2.1.3 and Celce-Murcia 2007). Highest priority domains include greetings, requests, descriptions, and responding to commands.

The team brainstormed where to begin in terms of content. We began by envisioning a typical day and imagining what language a community member might need to conduct the business of the day. Keeping in mind the social and cultural contexts in which language would be used, we realized that cassava bread production occupied the most time for the

⁹ We recognize that having such a large number of native speaking elders with whom to consult and teachers who are community members is not the norm in the North American context, where licensing requirements often prevent hiring of indigenous teachers to teach in their own communities. However, that situation may be changing. There have been some efforts made to train and hire indigenous teachers in communities with large percentages of indigenous students. C.f. the Sapsik'walá project at the University of Oregon: http://education.uoregon.edu/degree.htm?id=61

greatest number of people in the community. Therefore, the first set of lessons would be based on content from *The Cassava Film*, ¹⁰ an elicitation video produced as part of the documentation (c.f. Yamada 2007). The first year's curriculum would begin with basic greetings and classroom language and would be followed by the cassava-making process. Students would learn how to greet others in the community in the context of going to fell a field for cassava planting and progressing all the way through to eating cassava bread. As we discussed various elements, it became apparent that we would need several modules to cover all of the necessary language. We organized content into smaller units with functional topics such as greetings, asking what someone was doing, asking where someone was going, etc.

We also decided to document cultural practices one by one, beginning with cassava bread production. This was followed by fishing and *matapi* (basket) weaving. Each process was documented by filming the entire process in pieces, editing to create a single film, and recording speakers describing the resulting film. The products of documentation, which include audio and video recordings, as well as transcribed and translated texts, form the basis of the formal teaching curriculum. The first units focus on greetings and classroom language. Other early units, based on *The Cassava Film*, are the basis for the materials described in this paper. Additional documented practices form the bases for additional units. Since the processes of documentation and curriculum development are concurrent, each has informed the other. Teaching materials are not just drawn from existing documentation products; the choice of what to document is also guided by what elders and teachers feel is important to teach.

We recognize that 30–120 minutes of formal teaching per week will not create new speakers. However, there is real value in the undertaking nonetheless. Research has shown that explicit teaching, particularly at the adult level, can support acquisition of a second language (c.f. Doughty 2003; Norris & Ortega 2000), and is therefore a worthwhile pursuit. In Konomerume, formal teaching is but a single component of a greater revitalization effort in the region. In addition to supporting adults in their learning and introducing children to functional domains they can explore further at home, formal teaching is serving less quantifiable extralinguistic goals. Teaching young adults and their children concurrently serves to foster their interaction in Kari'nja. In addition, formal classes and materials in the language increase both its visibility and prestige in the village. This has resulted in native speaking elders using Kari'nja more frequently with members of younger generations—an unintended but extremely valuable result. It has not yet resulted in a return to intergenerational transmission (Fishman 1991), but has encouraged steps in that direction.

2.1.3 TEACHING METHODOLOGY. Before we could create materials in support of formal teaching, we needed to determine what approach to language learning would best fulfill our goals within the context of available resources and limitations. One of the biggest challenges was how to encourage communicative competence in learners while simultaneously

¹⁰ The Cassava Film is a locally produced elicitation video similar in function to The Pear Film (Chafe 1980). C.f. Yamada 2007 for a full description.

supporting teachers who are only passively fluent in the language. Communicative competence refers to a learner's ability to use language in a meaningful way in various settings. It is a teacher's responsibility to determine and enrich the path that promotes the skills needed to teach competency. Therefore, we needed to garner from the field of language teaching which teaching skills would support learners' communicative needs.

Although an in-depth examination of the history of language teaching theory was not immediately relevant to our planning, an understanding of our goals and how best to achieve them was. Since everyone agreed that we wanted students to be able to interact with each other and with elders, we needed an approach that emphasized functional fluency, meaningful language in context, social interaction, and conversation. We also agreed that the interaction of language and culture were essential components. Terminology from the field of language teaching that is relevant to this discussion includes *approach*, *method*, and *technique* (c.f. Brown 2001; Richards & Rodgers 1986).

Approach includes the theories of language and of language learning that underpin a method of teaching. A functional view of language (Richards & Rodgers 1986) best supports our goal of fostering effective communication in locally-relevant sociocultural situations. By this view, language is seen as a means of expressing functional meaning, and teaching methods that espouse this view tend to favor semantic and communicative characteristics over structural ones. Communicative competence, a term coined by Hymes (1972), applied to language teaching by Canale & Swain (1980), and elaborated by Canale (1983), refers to a speaker's ability to effectively perform linguistic functions in grammatically, sociolinguistically, strategically, and culturally appropriate ways. ¹¹ It is one of the goals of teaching methods that support a functional approach.

Our underlying theory of language learning is naturalistic and includes elements drawn from multiple researchers of principles and practices in Second Language Acquisition (SLA). Fostering language acquisition in a formal setting requires that learning activities be communicative, meaningful, and task-oriented (Richards & Rodgers 1986; Johnson 1982). Furthermore, successful learning depends on extensive input in the second language, opportunities for output (Ellis 2005:217–218), and comprehensible input that is slightly above learners' level of output (Krashen 1987). Finally, learners require an environment of trust that serves to foster positive affective variables and lower affective filters (Krashen 1987).

Theories of language and of language learning affect actual teaching practice in the area of method. *Method* refers to the ways in which an approach is realized in the classroom. This includes teacher and student roles, types and sequencing of tasks, and the form and role of instructional materials (Brown 2001:17). We realized that communicative methods that draw on functional approaches—including Communicative Language Teaching (CLT) and, especially, immersion—would best support acquisition of communicative competence. This recognition left us with one major question and one primary obstacle. The question was how and whether to introduce formal elements of language because the most strident communicative approaches disallow explicit grammar instruction. However, researchers such as Ellis (2006) and Norris & Ortega (2000), among others, have

¹¹ C.f. also Celce-Murcia et al. 1995 and Celce-Murcia 2007 for more detailed discussion of communicative competence and language teaching.

demonstrated that focused grammar instruction has value even within a communicative framework. Furthermore, we were left with the very real obstacle of non-fluent teachers. In addition, we recognized that native-like fluency would not come in 30–120 instructional minutes per week. Ultimately, we decided to use an eclectic format that allowed us to incorporate techniques from a variety of methods.

Techniques are what teachers and learners actually do. They include the "exercises, activities or tasks used in the language classroom for realizing lesson objectives" (Brown 2001:16). Many of the more communicative techniques would require more fluent teachers than we had available, while techniques that emphasize rote memorization would not support learners' achievement of communicative and interactive competence. Rather than emphasizing particular techniques, we chose to develop materials that teachers could use in a variety of ways. For example, we developed short dialogues that could be used for Direct Method-style question and answer activities, Audiolingual-style pattern practice drills, or CLT-type information gap activities. Teachers could use these with whichever techniques they felt most comfortable, depending on their own fluency and teaching style. During curriculum development and teaching methods workshops, teachers were given instruction in and opportunities to practice various techniques.

Our underlying approach, then, is functional with an emphasis on naturalistic methods that foster communicative competence. This emphasis is tempered by the understanding that teachers may use less functionally-oriented techniques in combination with communicative ones. As teachers grow in the language themselves, we expect them to transition to more communicative activities. We employ Immersion methods that provide as much input in Kari'nja as possible, but recognize that occasional clarification in Sranan Tongo or explicit grammar instruction is not inappropriate at the adult level. Teachers may employ a variety of techniques with teaching materials, but strive to stay in Kari'nja for the duration of a lesson. Furthermore, lesson content is locally culturally relevant, and topics are chosen from village-related activities. This is not content-based instruction in the traditional SLA sense (c.f. Snow et al. 1989) in that it does not draw from a school curriculum, but it none-theless seeks to employ content that is meaningful to students and that reflects their own experience in the greater social and cultural context.

Hinton (2003) outlines specific suggestions for teachers who are not fluent speakers but nonetheless want to teach for communicative competence. We have adopted many of these guidelines, including the following key points (most adapted from Hinton 2003):

- Kari'nja lessons are Kari'nja only. Use pantomime, illustrations, and other ways of conveying meaning rather than translation wherever possible.
- Limit lessons to no more than seven new elements per lesson. This will encourage
 mastery of new material in the short amount of time allotted, be less overwhelming to teachers or students, and give teachers the opportunity to be well-prepared
 in advance by consulting with elder speakers.
- Teach classroom management and general patter language (such as greetings and weather talk) early on to encourage staying in the language for the full lesson.

¹² C.f. Richards & Rodgers 1986 for a complete description of language teaching methods and techniques.

- Develop content that is context-rich and culturally appropriate. There would be no immediate need to coin a Kari'nja word for "snow" because snow does not fall in Suriname. 13 However, recognize that coinages are necessary for things such as bicycles and computers that are relatively new to the culture.
- Use realia where practical; photos and illustrations where not. This helps teachers to stay in the target language and resist the temptation to simply translate. In addition, students are encouraged to interact with language and the world around them in a way that mimics a more naturalistic setting.
- Incorporate elements of other naturalistic methods such as Total Physical Response (TPR) that replicate native language learning.
- Borrow techniques such as chain drills from the Audiolingual Method (ALM) to allow teachers to practice their own pronunciation as they teach, but use this only as one of many activities. Strive for more communicative techniques.
- Recycle previously learned vocabulary and build on it.
- Focus on verbs, complete sentences, and questions and answers that encourage
 interaction and negotiation in the language. For example, rather than having students memorize long lists of nouns in isolation, introduce frames (using realia or
 illustrations) for guided practice. Embed these in larger strings of discourse, but
 include patterns like:

What is grandma doing?	What are you doing, grandma?		
She is cassava.	I am grating		
baking	bitter cassava		
grating	coconut		
sifting	sweet cassava		
pulling	purple potato		

We developed a yearlong curriculum that was piloted in all grades as well as in the adult school. Notional-Functional thematic units include open-ended individual lessons, each of which is based on a short dialogue. The dialogues are then expanded with additional vocabulary. They are short so that teacher-learners can practice them with elders ahead of time to increase their own confidence. Activities that accompany lessons aim to encourage student interaction in the language. In addition, each lesson provides a familiar structure that can be covered in a 30-minute period. For the adult course, lessons serve as a jumping-off point for speaker-teachers who expand their content for young adult learners.

Content for dialogues comes from both *The Cassava Film* and from consultation with elder speakers. All dialogues will be recorded by elder speakers and will be available to learners on CD.¹⁴ These recordings complement formal teaching and enrich the documentary corpus.

¹³ This is a departure from the rest of the community elementary school's curriculum, which is based on the Dutch system. One can imagine that the need for a word for snow may arise in the context of talking about a family member who has moved to the Netherlands, but this would not be a planned part of the introductory curriculum, which focuses on more immediately relevant topics.

¹⁴ Learners all have access to CDs of the *Cassava Film* texts, but recording of the dialogues is still in progress.

3. MATERIALS DEVELOPMENT. We faced several limitations in developing materials. Available technology is extremely limited. Technological resources include one camcorder, one laptop computer, and one printer that belong to the Kari'nja project. The technology team, headed by Ms. Jubithana, operates and is responsible for these. Electricity recently came to the community in the form of a generator that runs for approximately three hours per night. However, fuel often runs out before monthly replenishment, so electricity cannot be counted on toward the end of a month. Since the generator came, several families have bought CD and DVD players.

With only one laptop computer, a community-accessible multimedia corpus as described by Nathan 2006 is simply not possible. In addition, lack of consistent electricity limits the kinds of materials that can be created for classroom use. Lessons for the elementary school cannot depend on DVDs, but those for the adult school (which is held when electricity is running) can contain a video component. However, still screen captures, printed onto paper, can be used, as can audio CDs since a few battery-operated CD players are available to the school.

Materials were developed with three primary goals in mind. The first is to support elementary school teachers, who are novice speakers, in both their teaching and learning. They require reference materials that describe the language in a language they can read and that provide useful examples of the language in use. Second, teachers at both elementary and adult levels (the latter of whom are native speakers) need pedagogical materials to use in the classroom. Third, learners need resources to support a more Kari'nja-rich environment at home. All materials add to the documentary corpus either by recording language as it is used or by increasing our understanding of Kari'nja linguistics. In the next three sections, I describe some of the materials we have developed and how they address our needs in terms of linguistic description and language teaching.

3.1 SUPPORTING TEACHER-LEARNERS

3.1.1 PEDAGOGICAL GRAMMAR AND DICTIONARY. The goal of supporting novice-speaker elementary school teachers is addressed with a small pedagogical grammar and a working dictionary. The former is based largely on a community-based grammar workshop and on Hoff's (1968) description of the language. The pedagogical grammar is in Sranan Tongo, and is intended primarily for teacher reference.

A working dictionary is based primarily on *The Cassava Film* texts and Hoff's (1968) word list. This dictionary differs from dictionaries created for academic audiences in ways that support local teaching efforts. It includes definitions in English and Sranan Tongo (and will eventually include Dutch), example sentences, text references, and reverse lookups in two languages. It takes a word-centered approach such that teachers can look up fully inflected words they come across in texts and find complete definitions. In addition, morphologically complex words include a parse line that cross-references the individual pieces. For complex headwords, there is a reverse lookup based on the root. Although its primary function is teacher reference, the dictionary is part of the documentary corpus. Most examples reference the texts, so users can look up example sentences in context. Figures 1 and 2 illustrate entry types.

The dictionary was created using Toolbox and LexiquePro. I use a Toolbox lexical database for parsing and glossing texts. Ms. Jubithana and Chief Mandé then use this database in LexiquePro to expand the dictionary. LexiquePro makes it easy to include locally-relevant elements such as reverse look-ups, cross-references, and multiple languages.

```
kynipja'kotopo:sang

Morph: ky- ni- pa'koto -po(ty) -ja -ng

[UrMa 0004]

Vt

English: S/he slashes it repeatedly.

Sranan Tongo: Ai kap'kapu eng.

See: pa'koto

Category: Cassava Film
```

FIGURE 1. Polymorphemic Kari'nja dictionary entry

```
pa'koto

[CeAr 0003]

English: slash; chop

Sranan Tongo: djonk; kap'kapu

Vt

English: Slash, as in the branches off of a felled tree. Contrast with /akoto/ 'fell.'
/akoto/ may only be used with erect things like a standing tree. /pa'koto/ may be used with other things like fish or meat.
```

Sranan Tongo: Kapu, leki te je djonk den taki baka di wan bon fala. A no de na srefi leki /akoto/ 'fala.' /akoto/ je gebruik nanga sani san e knapu, leki wan bon san no fala ete. /pa'koto/ e gebruik owktoe nanga tra sortu sani leki fisi noso meti.

Kiere apo pa'kotopo:satong.

They cut up the cassava sticks. Den e kap'kapu den kasaba tiki.

See: akoto, koto

Category: Cassava Film

FIGURE 2. Monomorphemic Kari'nja dictionary entry

¹⁵ C.f. Yamada 2010 for a description of ongoing training for community members that included a trip to Oregon for participation in the Northwest Indian Language Institute and Institute on Field Linguistics and Documentation funded by NSF Grant No. BCS-0965784.

Although learners do not have access to computers, printing versions of the dictionary in progress provides more immediate support than could be had by waiting for a final, published version.

3.2 PEDAGOGICAL MATERIALS

3.2.1 ORTHOGRAPHY DEVELOPMENT. Pedagogical materials include a lesson packet and accompanying visual aids such as posters and Talking Cards. The process of creating posters for the classroom provided opportunities to discuss orthography, and led to the eventual development of a new practical orthography. We had several specific issues in orthography development and felt that previous choices by Hoff (1968) and Courtz (2008) did not meet our needs. We were concerned with creating a practical orthography that could be typed on a standard keyboard by novice typists. We hoped to avoid the introduction of additional keystrokes necessary to produce symbols such as η and ï. In addition, we needed to decide whether and how to represent phonological processes in the language.

We decided that novice speaker-teachers needed all the support an orthography could give them in terms of representing the language as it is spoken. Therefore, we represent a regular process of post-*i* palatalization with digraphs that include *j* as the second element. There is some ambiguity inherent in this choice in that *t* and *k* both palatalize to the same place of articulation and are both represented with *tj*. In addition, this representation of palatalization obscures related forms. For example, *kupi* 'wash' becomes *nitjupi*- when inflected for third person. As learners become more comfortable with reading the language, we may revisit this choice and decide that we no longer need to represent phonological processes in this way. Table 1 illustrates the palatalization component of the practical orthography.

Process	Kari'nja	Gloss	Inflection	Result	Gloss
p > pj	pori	'branch'	i-pori-ry	ipjoriry	'its branch'
m > mj	mainja	'field'	i-mainja-ry	imjainjary	'h/her field'
n > nj	nimjoku	'hammock'	i-nimjoku-ry	injimjokuru	'h/her hammock'
w > wj	wenapo	'behind'	i-wenapo	iwjenapo	behind h/her'
t > tj	tunda	'arrive'	ni-tunda-i	nitjundai	's/he has arrived'
k > tj	kupo	'atop'	i-kupo	itjupo	'on it'
d > dj				idjeke	'for that reason'*
r > dj	-ry	'Pssd'	woryi-ry	woryidjy	'h/her woman'
g > dj	pingo (ST)	'bush pig'		poindjo	'bush pig'
j > dj	jako	'at.time'	i-jako	idjako	'at that time'
s > sh	sapato	'shoe'	i-sapato-ry	ishapatory	'h/her shoe'

Table 1. Palatalized consonants * This form is likely polymorphemic, historically.

Other specific issues in practical orthography development include how to represent a high, back, spread vowel. Previous choices include i and i, both of which require additional keystrokes. We decided to follow the Dutch system and use j for the palatal glide, freeing

y for the high back vowel. This is also consistent with our representation of palatalized consonants.

Although the orthography as developed has served most of our needs, there remain some outstanding issues. The prosodic system in the language remains poorly understood, in particular the assignment and realization of primary stress. There is evidence that stress may be realized through the interaction of vowel length and pitch excursion, but further work is necessary to fully understand the system. In addition, historical and morphological processes affect the rhythmic structure. As such, we have chosen to represent strong vowels in some situations but not others. We will revisit our choices as we develop a better understanding of the system as a whole, and expect to make additional updates.

Orthography development served both documentation and teaching needs. Using a practical orthography that speakers were involved in creating makes print materials immediately accessible to them. In addition, it affords them full participation in the documentation and revitalization process. Since community members are involved in all aspects of documentation as well as revitalization, a practical orthography that is easy for them to use is essential to accurate transcription of recorded texts.

3.2.2 VISUAL AIDS. Creation of the numbers poster illustrated in Figure 3 uncovered some interesting facts about Kari'nja numbers. We discovered that no one in the community really remembered higher numbers in Kari'nja because they had all been replaced with Dutch numbers (or they had never been used). Chief Mandé had developed his own system that he was promoting in the community. We consulted Hoff (1968), but ultimately decided to use Chief Mandé's system, as other middle-aged speakers were already using it. The primary difference is the order of elements and the use of an inflected post-position in Chief Mandé's system. For example, the number 11 is compared below: ¹⁶

Chief Mandé	Hoff (1968)
aijapotoro owing itjuponaka	aijapotoro kuponaka owing
aijary -opatoro owing i- kupo naka	aijary -opatoro kupo naka owing
hand -on.both.sides one 3- on toward	hand -on.both.sides on toward one
Lit. 'both hands with one on its top'	Lit. 'on top of both hands comes one'

TABLE 2. Different representations of Kari'nja eleven

This process has served documentation by increasing our understanding of Kari'nja numbering systems. It has served formal teaching by agreeing on a consistent system to use in the classroom. Both were accomplished in the context of creating pedagogical materials.

¹⁶ Note also palatalization in *itjuponaka*. The underlying form, *kupo*, is represented in the parse line.

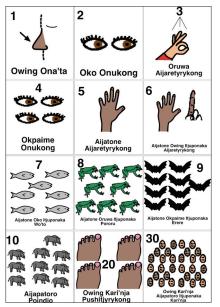
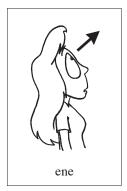


FIGURE 3: Kari'nja numbers poster

Additional visual aids include line drawings, cartoons, and photographs, many of which are screen captures from documentation videos. Two primary questions in their development included whether or not to include words on individual illustrations, and how to illustrate morphological complexity in the language. Since pronouns and adpositions tend to have fewer inflections, we included words for these, but not for verbs and nouns. We tried several systems and rejected others, because they added much complexity but little in terms of illustration of forms. For example, one system included separate, color-coded cards for inflectional morphology, some of which can be used with different word classes. By this system, *senejatong* 'I see them' was represented with four cards: one for *s*- '1A3O,' one for *ene* 'see,' a third for *-ja* 'present,' and another for *-tong* 'collective' as illustrated in Figure 4.





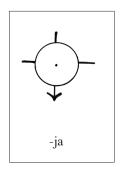




Figure 4. Illustration of Talking Cards for *senejatong* 'I see them.' Morphemes depicted include *s*- '1A3O,' *ene* 'see,' -*ja* 'Present Tense,' and -*tong* 'Collective Number.'

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This proved unwieldy for teachers. In addition, it invites comparison to other languages that represent the different elements with different words. Instead, we now have one card representing *ene*, and teachers model the different inflected forms with a single card. Teachers prefer to work with fewer cards and the single card is more true to Kari'nja, which can represent an entire transitive or intransitive event with a complete sentence consisting of a single inflected verb.

In general, materials take a word-centered approach that de-emphasizes metalinguistic discussions of morphology. However, teachers have found that adults benefit from lessons that incorporate discussions of grammar. As a result, elder teachers have included such discussions as a part of their lessons. Materials nonetheless assume learners will learn grammatical structure inductively. We use a "Talking Cards" (Beavert et al. 2005) system whereby teachers and learners use cards where it is impractical to use realia. For example, a process such as cassava baking takes several full days to complete and would not be practical to actually do in a 30-minute lesson. Even breaking the process down into its component parts is impractical since even the shortest part, peeling, takes at least a couple of hours. The idea of peeling a single root or just a few to demonstrate would make a later step in the process impossible because squeezing the grated cassava depends on a greater volume of grated cassava than a few roots would provide. However, teachers do bring in the actual tools used in the process, such as the basket in which grated cassava is squeezed, which they then complement with Talking Cards of the unwieldy, heavy iron baking pans that are a permanent fixture in most outdoor kitchens.

Talking Cards were developed by the Northwest Indian Languages Institute (NILI) for use in teaching indigenous languages of the Pacific Northwest. Talking Cards are somewhat like flash cards and are used to introduce topics and reinforce vocabulary building and communicative fluency. They remove focus from the written word, and help to foster associations between items and the lexical unit that represents them. In addition, Talking Cards encourage the use of the target language only, and help to move students out of a translation mode (Beavert et al. 2005). What makes them unique is the ways in which they are employed and the culturally relevant content they represent. Like those developed by NILI, our Talking Cards represent items, actions, and grammatical categories that are unique to Kari'nja language and culture.

Talking Cards may be used in a manner similar to traditional flashcards. For example, at the beginner level, a teacher may pass out cards representing various activities such as peeling, grating, and baking cassava. The teacher would then ask students in Kari'nja what they are doing and they would respond based on what is illustrated on the card they are holding. Higher-level learners may also be asked to describe additional aspects of an illustration. In addition to these more traditional uses, Talking Cards are also used to support the inductive acquisition of structure. For example, Kari'nja, as a mostly verb-final language has a different word order than either Dutch or Sranan Tongo. For a question such as that in example (1), 'Where are you going?' three cards, including one for a question particle, are needed for the question and another three for the answer, 'I am going to my garden.' In both, the learner will see that the verb comes last in Kari'nja without the teacher making specific reference to word order. For the question, the teacher may place a card for 'whither' (oja), one for the question particle, ko, and one for 'go' (mysang) on the board or in front of the learner. The learner may then arrange the cards for 'garden' (mainja), 'toward'

('wa) and 'go' (wysa) to form his or her answer. This system also helps learners begin to see that grammatical functions fulfilled by individual words in the dominant languages may be done morphologically in Kari'nja, resulting in fewer individual words per sentence.

(1) Oja ko mysang? Mainja 'wa wysa.

oja ko mysang mainja 'wa wysa
whither QP you.go.Dbt garden toward I.go
'Where are you going?' 'I am going to my garden.'

Figures 5 and 6 illustrate Talking Cards.



FIGURE 5: Amoro 'you' Kari'nja Talking Card



FIGURE 6. Kiere kumitjyry 'cassava washing' Kari'nja Talking Card

3.3 LEARNER RESOURCES. Learner resources include "Books on Tape," or transcribed, translated texts from documentation materials with CD recordings to accompany them. In addition, learners have access to DVD copies of documentary videos upon which audio and texts are based as well as the dictionary described in section 3.1. In developing these, the team (speaker-teachers in particular) decided that Toolbox-type texts, which include parsing and morphological information, were too "busy," and distracted readers. Instead, simple interlinear translations were extracted from the texts. Figure 7 illustrates a portion

of one such text (Dutch translations will be included soon). Speakers are indicated with a four-letter code, and individual sentences are numbered for easy reference. Every word in the texts has a dictionary entry, and text reference codes are listed with dictionary entries so that the two resources complement each other. Examples, then, can be found in context.

This cross-referencing component is extremely useful to both descriptive linguists and to adult learners. For example, when looking for examples of particular phenomena, I can find an inflected form in the dictionary, see whether the example sentence is an appropriate illustration, and then look up the greater discourse context in which it occurred. This makes the data more transparent and ensures I find the most appropriate example possible. For learners, the reverse process is helpful. They can listen to a CD and read along in the text. They can then look up fully inflected words they are unfamiliar with and find additional example sentences and parsed forms. They can also then look up individual morphemes. Figure 7 illustrates a portion of a Book on Tape text.

Cecilia Arupa CeAr 0001	Eropo oty tymainjara akotojang. Sranan Tongo: Djaso ai fala eng gron. English: Here he fells his field. Nederlands:
CeAr 0002	Da kynomanong. Sranan Tongo: Dan ai fadon. English: Then it falls down. Nederlands:
CeAr 0003	Djombo oty moro, wewe poriry pa:kotopo:sa, kynitjokotopo:sa. Sranan Tongo: Dan ai kapkapu den taki foe a bon, ai kotkoti den English: Now, um, that, he slashes the tree branches, he slashes them. Nederlands:
CeAr 0004	Da eropo tymainjary tykoroka, i'ja mang. Sranan Tongo: Dan djaso a bron a gron foe eng. English: Then here he is burning his field. Nederlands:
CeAr 0005	Djombo, tymainjary weritja:no. Sranan Tongo: Dan ai krin a gron foe eng. English: Then, he clears his field. Nederlands:
CeAr 0006	Eropo pjyty kynanu:ja, tymainjary anu:ja. Sranan Tongo: Djaso a frow foe eng ai tjapu, a tjapu a gron foe eng. English: Here his wife hoes, she hoes her field. Nederlands:

FIGURE 7. Example of a "Book on Tape" for Karin'nja speakers

A learner using this text might encounter the unfamiliar *kynitjokotopo:sa* in the third line. Looking it up, he or she will find a dictionary entry that includes the information in Figure 8, including a simple free translation in Sranan Tongo.

```
kynitjokotopo:sa See: ky- n- koto -po(ty) -ja. [CF CeAr 0003]

Vt. English s/he cuts it up. Sranan Tongo ai kot'koti eng. See: koto. Category: Cassava Film.
```

FIGURE 8. Kari'nja dictionary entry

The learner may be satisfied and may stop there. However, if she or he chooses to examine the individual morphemes, the learner will find that the root, *koto*, means 'cut,' and the additional morphology includes personal prefixes meaning '3A3O,' and TAM suffixes that indicate iterative aspect and present tense. Further, the learner would find an additional example sentence for the root *koto* that illustrates it in a different grammatical context such as *Wewe kotojang* 'S/he cuts the tree.'

- **4. ASSESSMENT AND OUTCOMES.** Since our work is long-term and ongoing, assessment and improvement of materials is essential. Community members intend to eventually develop a several-year curriculum for both elementary and adult levels that can be used in other communities. Before developing new materials, we need to know what has worked and what has not. Teachers piloted learning materials over the course of a school year and we held a materials and program assessment workshop in July of 2008. In it, we discussed several issues including the following:
 - materials themselves, including their ease of use and their appropriateness
 - · program design and its improvement

Each of these is discussed in the following sections.

4.1 MATERIALS. Young adult teacher-learners, middle-aged teacher-speakers, and adult learners all participated in assessment of teaching materials. It was not considered culturally appropriate to include children in this assessment. All participants agreed that the dictionary is the most useful tool developed. Although it is flawed, adult learners and teachers nonetheless appreciate its existence and refer to it often. An updated dictionary will include Dutch glosses, expanded examples, and more elder speaker involvement in editing with a goal of correcting spelling and glossing errors. In addition to its tangible use as a reference tool, its mere existence has increased the prestige of the language in the community. Elders can open a book in which something has been written down in their language. More importantly, they can *read* it. Their language has a value and prestige on a par with more dominant languages with longer literary traditions. Having community-accessible print materials supports pride in the language in a concrete way.

The second most useful tool, according to participants, is the set of "Books on Tape" texts. Having Sranan Tongo free translations is essential to their having value in the community. Although the Kari'nja portion of Hoff's (1968) texts is extremely valuable to

community members, their translation into English does nothing to support learners literate only in Sranan Tongo and Dutch.¹⁷ We are in the process of creating free translations of all texts into Dutch, as well.

The pedagogical grammar as a product has been useful to only a small number of young adult teacher-learners. Although all middle-aged speaker-teachers participated in its development, and the process of creating the grammar was useful in the evolution of their understanding of the academic component of grammatical analysis, they nonetheless find it to be too abstract to be very useful to them as teachers. We held a short workshop with young adult learners and distributed copies of the grammar to them in 2009. Since they have more formal schooling, we hope that they will be able to make use of the grammar. We have planned another assessment workshop for 2011.

During the workshop where these facts came to light, I realized that, although elder speaker-teachers were able to understand and assimilate our discussions of Kari'nja grammar, they were less able to comprehend written Sranan Tongo descriptions of it. Although they are literate in Sranan Tongo, they are more accustomed to reading abstract descriptions in Dutch. In addition, there was a significant time lag between our grammar workshop and printing copies of the grammar. I made the inaccurate assumption that they would be able, after several months, to read and comprehend a written version of what had been an oral workshop. Although the younger teacher-learners were able to do this, the elder speaker-teachers were not. A better model would have included sufficient time to have a separate grammar workshop for the speaker-teachers, led by the teacher-learners, once a printed version of the grammar became available.

The visual materials, including posters and Talking Cards, as well as the accompanying lesson packet, have been very successful in the elementary school. Busy teachers appreciate being able to simply grab a folder that includes everything they need to teach a 30-minute lesson. Most of the illustrations are clear and useful, and the dialogues are brief enough while still providing adequate room for creativity. Teachers report that children are excited when the lesson folders come out and are enthusiastic about learning new content in Kari'nja using techniques that depart from the more traditional methods used throughout the rest of the school day. Adult school teachers, however, were less comfortable with the Talking Cards and lesson packet. This is largely due to their lack of experience in classroom teaching techniques. They were unsure how to best incorporate visuals into their lessons and did not fully understand the lesson packet's organization. This situation will be addressed with a restructuring of the adult program described in the next section.

CD audio recordings represent another tool that has both tangible and intangible benefits. Learners actively listen to recorded texts and read along. They have found that the recordings are invaluable in terms of increasing their listening skills and helping them learn the rhythmic system of the language. Elder speakers have enjoyed listening to each other and have used the recordings as a way of remembering forgotten vocabulary. Just listening to someone else talk about a particular topic has caused many an elder to say something

¹⁷ Note that there was little need for support of revitalization in Hoff's time, as the language was still vibrant then. The set of sixteen texts included in his grammar was, for a long time, the only available documentation of the Aretyry dialect, and for that, community members and I are grateful.

like, "Oh, yeah! Now I remember the word for '_____' is _____." Or, "She's using a Sranan Tongo borrowing here! That word in Kari'nja is _____."

In addition to modern recordings, Berend Hoff has generously provided copies of all recordings he made in the 1950s. Listening to their ancestors' stories and songs has had a profound emotional impact on the community. Even the toughest tough guys cried as they heard, for the first time, the actual voices of long-deceased grandparents. After listening to recordings of her aunts and great aunts singing, Henriette Alkantara was inspired to "sing the old songs" at her 80th birthday this year. We were all wiping the tears away as we listened to her and her sisters sing these songs accompanied by their adult grandchildren. These kinds of benefits cannot be quantified and are rarely a part of our public discussions, but they are of increasing importance in situations of language endangerment. The connection to heritage that was revived with listening to the old recordings has strengthened the bonds between today's generations and has renewed the younger people's dedication to reviving Kari'nja.

4.2 PROGRAM. Overall, the teaching program has been successful in that children are enthusiastically taking home the Kari'nja they have learned in school. Adult learners, too, are motivated and dedicated to learning and are pleased with their own progress in the language. However, a recent tragedy has forced a complete restructuring of the program.

In June 2008, one of the middle-aged speaker-teachers died unexpectedly. She was a major force in the Kari'nja documentation and revitalization program and is irreplaceable. However, her death has highlighted the motivation and dedication of other members of the project. Despite the tremendous loss—both personal and in terms of the program—experienced with her death, other members of the team have expressed their commitment to continuing their work in her absence. In addition to her loss, Chief Mandé, too, will no longer be teaching. Financial obligations have forced him to move to Paramaribo.

Since October 2008, Ms. Jubithana has taught the adult school course in cooperation with Maria Alkantara and Cecilia Arupa. In addition, she is training two more teacher-learners, Regina Chu and Yvonne Marlbons, to teach the adult course. This five-member teaching team will be responsible for carrying the adult course forward and will begin curriculum development for upcoming years.

The three elementary school teachers, Ms. Jubithana, Ms. Chu, and Ms. Marlbons, have made the most use of the pedagogical grammar and lesson materials and will use them to support their teaching of the adult course, as well. Ms. Alkantara and Ms. Arupa provide content in the form of functionally useful language, and Ms. Jubithana, Ms. Chu, and Ms. Marlbons develop lessons that incorporate both language in use and metalinguistic discussions. We hope this expanded team can better support adult learners in part by making use of all available resources.

The dedication to continuing despite the loss of two primary players illustrates the benefits of a community-based approach. It is not simply a single outsider academic or speech community linguist who is responsible for documentation and revitalization, but rather an entire community that owns and is responsible for its language.

5. CONCLUSION. You may have gotten this far and may now think, "Who has the time to do this? I have a reference grammar to finish!" If there is one primary take-home message

here, it is that one person cannot do it all. The idea of the "lone wolf" linguist is a thing of the past. As we develop approaches to linguistic fieldwork that view speech community members as partners rather than consultants (or worse, "subjects"), there is less pressure on the academic linguist to do it all. With a team approach, community members and outsider academics work together and share each other's strengths. In the example described here, the young adult teachers have teaching experience, but are not fluent speakers. Elder speakers have the language but are not experienced teachers. Together, the two groups form a team that is capable of planning for and teaching the language formally. As the team identifies what and how to teach, we all work together to make sure our documentation can support specific teaching goals. This is not unlike the situation for Masters and Apprentices described in Hinton et al. 2002.

Our commitment to a community-inclusive approach dates to our work together when I was a Peace Corps Volunteer. Early on, we established relationships based on shared goals and a mutual desire to work in a sustainable way. Chief Mandé told me, several years ago, that he no longer wanted to allow researchers into the community because they only took and never gave back. He once challenged a researcher, "You come here to study me. When do I get to go to your country to study you?" His views have shaped our work together on Kari'nja, as he was adamant that he and other community members be included in the research as partners rather than as "subjects." I am constantly reminded that I work with people rather than with a language in a vacuum. Chief Mandé, Ms. Jubithana, and other community members have shaped my approach to research that concerns them by actively engaging in that research.

As for questions of pedagogy, it is better to ask how students learn and how teachers will teach before making materials. For the academic linguist whose schooling and experience are limited to theoretical linguistics without an applied focus, it is possible to develop partnerships with pedagogy specialists either within the speech community or at the home academic institution. What has worked for me is involving the language teachers in the documentation process. They are the ones who are responsible for formal teaching, and are best able to articulate what their needs are in terms of materials and content.

That said, I recognize that it may be impractical to address pedagogical questions at the outset of documentation. It is nonetheless possible to make one's corpus more "pedagogy friendly." Rather than assume that a good, varied documentary corpus is easily mined later for pedagogical needs, research into what those needs are can pay big dividends in terms of making a corpus maximally useful. According to Nathan & Fang (2008:178),

"Documenters can contribute to language pedagogy in four main areas:

- A. undertake basic training in awareness of issues in language pedagogy in order to better understand how to make their materials useful for language teachers and learners
- B. prepare resources using cross-disciplinary teams
- C. share their sociolinguistic research to help in the planning and establishment of language programs
- D. create pedagogically useful metadata"

Here, again, I advocate a team approach. Working with those speech community members who will be responsible for formal teaching is obviously the ideal choice, but that may be impractical. At my university, I have gotten invaluable advice on meeting pedagogical needs from language teachers and pedagogy specialists in departments other than Linguistics. In addition, I have worked as an instructor with the Northwest Indian Language Institute (NILI), where I have learned about pedagogical issues from indigenous language teachers.

The projects described here assume a long-term commitment to a particular community. Our community-based approach has allowed us to grow together and develop relationships that carry us through the highs and lows of planning and implementation. I began this project with strong academic training, but collaboration demands that I not be the one with all the answers. Much of what we do is experimental, and not everything works. However, we have fun, we carry on, and we keep looking for things that resonate with all of us. Our strong interpersonal relationships make this possible.

Where does this leave a linguist interested in data specific to an isolated issue who really does not have time to devote to community issues? Here too, a collaborative approach is useful. Establishing partnerships with existing longer-term projects is better than striking out alone and risking being labeled a "helicopter researcher" (Lutter 2007) who benefits from a community's generosity without contributing in any direct way to the preservation of the language of study. In the Konomerume case, community members have been happy to share data with researchers working to better understand Cariban linguistics as long as the researchers share their results with the community. Although there may be no direct link to formal teaching, speech community linguists are nonetheless interested in better understanding how their language fits in the greater Cariban context, and can often find useful tokens of language in an article's examples. This is only possible if researchers make their work both physically and intellectually accessible to the community through partnerships with either community members or established researchers. Making work intellectually accessible usually includes providing community members with at least some elementary training in the ways in which academic linguists analyze language. Training for speech community members is one of the hallmarks of the Community Partnerships Model (CPM) of fieldwork articulated in Yamada 2010. Simply leaving behind copies of academic articles with no support for community members' use of them does not fulfill the goal of making results accessible.

This paper provides a case study example to address the need for a practical approach to documentation in direct support of formal teaching of endangered languages. The real superheroes here are the speech community linguists who are working against tremendous odds to preserve and revitalize their minoritized and endangered languages. Their work is arduous, unpaid, ongoing, and requires a tremendous amount of motivation. They have a direct interest in research into their languages and deserve a voice in the process. Their participation, dedication, and ownership of our projects are essential not just to meeting their own goals for revitalization, but to my work in linguistics as well. We share a commitment to cooperation. My goal is not "giving back," but rather "working together" to cooperatively identify and undertake mutually beneficial projects such that we all share both the workload and the benefits.

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