Shifting teacher/learner roles in language reclamation efforts relying on digital technology

Edwin Ko
University of California, Berkeley

This paper examines social interactions between caregivers and youths at two language revitalization camps of Northern Pomo, a dormant language of Northern California. Drawing from video- and audio-recorded interactions at the two camps, I examine the discursive strategies caregivers use while collaborating with youths in joint language-learning activities. Because some of the activities rely on the use of digital tools, I also investigate whether the use of digital technology has any effect on these strategies and on social interactions more generally. By employing discourse analytic techniques, I find that youths often position themselves in the more powerful role of teacher while positioning caregivers in the role of student regardless of whether digital technology is used. The key insight is that caregivers, who act as agents of primary socialization, acquiesce in the roles that are imposed on them. They do this by surrendering some of their own authority to create a space that helps to promote youth empowerment. Thus, inversions of positions – and power – may be seen as a welcoming and, perhaps, important aspect of the language revitalization endeavor.

1. Introduction

It has been widely acknowledged that a core aspect of ‘successful’ language revitalization is for the language to be used within family settings, such as the home (e.g., Hermes & King 2013; Hinton 2013; Chew 2015; Child Language Research and Revitalization Working Group 2017; O’Grady 2018). In fact, Hinton (2009, emphasis hers) proclaims that “revitalization programs and processes in most of the world have not yet succeeded in doing what could be argued to be the heart of language revitalization – returning the language to the home and family.” In this way, the ultimate goal of language revitalization is often implied to be intergenerational transmission of the language (e.g., Fishman 1991; 2001; Grenoble & Whaley

---

1 I am indebted to my Northern Pomo language camp collaborators, Erica Carson Jr., Julia Nee, Cathy O’Connor, Brady Dailey, and Ethan Rimdzius, as well as to all the participants at the camps for their engagement, support, and feedback on this project. I wish to also thank Chris Baier, Patricia Baquedano-López, Jenna Burrell, Andrew Garrett, Leanne Hinton, Laura Sterponi, and two anonymous referees for helpful discussions and comments at various stages of this project. All errors are my own.

2 However, Hinton (2015) shifts her perspective on what counts as success and argues instead that “language revitalization and its successes are individualistic, varied, evolving, and often small yet leading toward growth; success is not an endpoint but a process.”
Assuming that community members do endeavor to bring their language back to the family and into the home, this task is made even more difficult in situations where there are few or no remaining fluent speakers.

In these scenarios, parents and other caregivers who wish for their children to speak the language, are often learners of the language themselves and participate in language-learning activities alongside their children. Therefore, caregivers must strike a delicate balance between acting as agents of primary socialization, where they may provide injunctions on appropriate behavior and instill their own values in their children, and acting as collaborators in joint language-learning activities, where they are on a (relatively) equal footing with their children vis-à-vis their knowledge of the language and thus may be less equipped to assess their linguistic ability. As such, the distribution of power – the ability to influence the behavior of others – tends to fluctuate. Given these social roles and the different power configurations associated with them, this work examines the strategies that caregivers use when they engage in language-learning activities with their children in an attempt to promote and sustain collaboration within language revitalization contexts.

Moreover, if the language is no longer being fluently spoken, as is the case with dormant, sleeping, or awakening languages, then the use of digital technology plays an even more crucial role. Without fluent speakers, learners who wish to pronounce the sounds of the language must rely on audio recordings (if they are available). Within the past decade, the use of digital technology has proliferated in language revitalization, taking on a greater number of forms and being used in more varied and creative ways. According to Hinton (personal communication, 2019), digital technology has become “better integrated into language revitalization than before.” But as we attempt to learn more about how to revalorize, reclaim, and revitalize endangered languages in effective and appropriate ways, it bears investigating how digital technology comes to be integrated. Therefore, this work also examines whether the use of digital technology affects how people collaborate in revitalization efforts.

In this paper, I examine social interactions between caregivers and youths at two language camps of Northern Pomo, a dormant language of Northern California. At these language camps, participants are essentially beginning learners of Northern Pomo. Drawing from video- and audio-recorded interactions at the two language camps, I explore how caregivers and youths collaborate while they participate in various language-learning games and activities, some of which rely on the use of digital devices. The episodes for the analysis are drawn from naturally occurring interactions during two language camps, which together span four six-hour days. Because both camps blend face-to-face instruction and online learning, they provide an environment well-suited to compare technology use and non-use in language revitalization efforts (Ko et al. 2019). As such, this paper also considers how the use of digital technology affects collaborative language learning between caregivers.

---

3 In this paper, I use the terms *digital technology* and *technology* interchangeably.

4 I use the term *caregiver* as opposed to *parent* to include those who take on a caregiving role but are not immediate family members. I also use the term *youth* in this paper to include those who are still in their early to mid-twenties.
and youths. What I find is that youths often position themselves as the teacher and caregivers as the role of student when engaging in language-learning activities in collaboration with their caregivers. The key insight is that caregivers acquiesce in the roles that are imposed on them. They do this by surrendering some of their own authority to create a space that helps to promote youth empowerment. Furthermore, I find that, by and large, the use of digital technologies does not impinge on the way individuals are learning with each other, although there are some sites of contention that need to be addressed.

Since the use of digital technology figures prominently into the discussion, it is important to mention that I am not advocating that digital technology must be used or that technology will ‘save’ languages that are spoken by few or no members of the community. Digital technologies are tools, and just like any tool, they have appropriate and inappropriate contexts of use. In a dormant-language revitalization scenario, the use of audio recordings is critical: they represent rich input for learners at any level and provide opportunities for learners to listen to their ancestors. Relying on written documents alone when audio recordings of the language exist, especially without any linguistic training, is perhaps an unnecessary challenge. While this paper focuses on one particular dormant-language revitalization scenario, these findings may provide useful insights applicable to other revitalization efforts. The reality of the situation is that digital tools have been and will continue to be used in language revitalization in varied and creative ways. As the use of digital technology becomes increasingly more sophisticated, the gap in our understanding of digital tools also widens. My goal is not to portray digital technology as a panacea; rather, I acknowledge that its use can provide both benefits and challenges to language revitalization efforts.

2. Northern Pomo language camps This study draws upon data from two weekend language camps for learning Northern Pomo held in March and June of 2019. At these language camps, learners engage in a variety of language games and activities to learn Northern Pomo, a Pomoan language traditionally spoken in and around the Mendocino County area of Northern California. The language is considered ‘dormant,’ ‘sleeping,’ or ‘awakening’ as there are not currently any (known) fluent speakers – the most recent fluent first-language speaker, Elenor Stevenson Gonzales, passed away in 2005. However, there is still a community who identifies with the language and wishes to learn and revitalize it.

There is a large body of extant documentation on the language that includes fieldnotes and audio recordings (Campbell et al. 1966–1967; Guerrero et al. 1966–1968). In particular, linguist Catherine O’Connor, who worked with Edna Campbell Guerrero beginning in 1979 and then Gonzales in the late 1980s, documented the language most extensively, producing around six hundred hours of audio recordings of Northern Pomo, many pages of fieldnotes, and a dissertation describing several major topics of the language (O’Connor 1992). Today, these documentation materials are either archived at the Survey of California and Other Indian Languages (Guerrero et al. 1985) or are on their way to being archived. Thus, the archived audio recordings, which must be accessed using a digital device, are the only source
to listen to the language.

During the 2018 *Breath of Life Institute* held at the University of California, Berkeley, in June, Erica Carson Jr., a learner-teacher of Northern Pomo, invited Julia Nee and me, who are graduate students at the University of California, Berkeley, and are Irish American and Chinese American, respectively, to help design language activities for a Northern Pomo language camp. Erica is a dedicated teacher with Northern Pomo and Wappo heritage and an enrolled member of the Redwood Valley Rancheria. She has been a learner-teacher of Northern Pomo for over a decade, teaching at different cultural events and schools in and around Mendocino County, California. While Erica takes on the role of instructor at the language camps by leading some of the language activities, she also participates as a learner in the other activities. The differences in these roles are made apparent by how she interacts with other learners. For example, as an instructor, she stands in front of the classroom and provides instruction to the learners as well as rules and directions about the various language games and activities. As a learner, she sits with other learners and receives and carries out instructions provided by the instructor. In my analysis of social interactions at the language camps, unless otherwise indicated, Erica appears to be primarily a learner.

To prepare for the language camps, Julia and I spoke with Erica once a week in the months preceding the camps to discuss ideas for language games and activities as well as the learning goals. We created didactic activities and lesson plans that we then implemented, some of which involved teaching learners how to navigate and use the *Northern Pomo Language Tools* website. This website contains several components, such as a talking (or audio) dictionary, a searchable corpus of sentences and phrases with audio that we call the *Phrasicon*, and a stories and texts page, which contains several stories spoken in Northern Pomo, among others. While Erica, Julia, and I were the instructors at the first language camp, we were joined by Catherine O’Connor and her two research assistants, Ethan Rimdzius and Brady Dailey, at the second camp. Both language camps were held in the Education Building at Redwood Valley Rancheria in Redwood Valley, California, and each camp spanned two days over a single weekend. Each day consisted of six hours from 10am to 4pm, resulting in twelve hours for a single language camp. The number of participants on each day ranged from sixteen to thirty-three, and the participants consisted of young children, adolescents, adults, and Elders; nineteen of the participants who attended the second camp also attended the first one. It is important to note that essentially all participants were beginning learners of Northern Pomo.

During the language camps, the instructors took turns leading the various language games and activities. A few of these activities had learners form groups, but in all other cases, learners were given the option to work on their own or with other people. In addition, some of the activities occurred after short lessons on relevant aspects of the Northern Pomo grammar to provide learners with the necessary scaffolding to complete the tasks of the activities, such as identifying the letter that corresponded to a particular sound. In general, the activities were developed with

---

5 The *Northern Pomo Language Tools* website is accessible at http://northernpomolanguagetools.com.
the following goal in mind: to teach learners how to navigate and use the *Northern Pomo Language Tools* website.

### 3. Data and methodology

**3.1 Data collection** During both language camps, a video camera was mounted on a tripod and placed in the back corner of the room (Figure 1). Except during lunchtime, when participants would have conversations of a more private nature, the language camps were entirely videotaped after obtaining consent from the participants. In total, roughly twenty hours of video recordings and six hours and thirty minutes of audio recordings were collected across the two language camps, of which ten hours of data – approximately four hours of video recordings and six hours of audio recordings – were transcribed using ELAN, a time-alignment annotation software.

The episodes of interactions are transcribed using an adapted version of the “Santa Barbara School” discourse transcription conventions (Du Bois et al. 1993; see Appendix A). Here, I restrict my focus on family discourse, that is, interactions between adult caregivers and youths, leaving aside other important interactions, such as peer group interactions (i.e., interactions among youths or interactions among adults) and other cross-generational interactions, for future research. The transcriptions include sixty-four distinct social interactions across contexts where (a) caregivers provide injunctions to youths, (b) caregivers and youths are positioned as teachers and students, respectively, and vice versa, and (c) conflicts occur when digital technology is being used. Eight of these social interactions are used as illustrative examples in this paper.

---

6 There are significant differences in how the data were collected that affected the quality of the transcriptions across the two language camps, which include differences in recording devices as well as the setup of these devices. For example, only video recorders were used in the first camp, whereas audio recorders were also used during the second camp; the latter greatly facilitated transcription of verbal interactions that took place between participants within the vicinity of the recorder.

7 The collection containing the video and audio recordings of the Northern Pomo language camps is archived at the Survey of California and Other Indian Languages at the University of California, Berkeley (Carson et al. n.d.). Resources associated with the language-learning games and activities, such as instructions and relevant language materials, are also archived in the collection.

8 Not all the caregivers and youths in my sample are immediate family members. Based on my observations of several community events, many participants, particularly those of the Redwood Valley Rancheria, are part of a close-knit community where adults and Elders may share responsibilities in caring for youths.
3.2 Design of the study  To examine how technological devices might be affecting the social interactions between caregivers and youths at the language camps and the discursive strategies caregivers use in their attempts to rally collaboration around the language-learning activities, I differentiate contexts where participants interact while using digital tools, such as mobile phones, tablets, or computers, from contexts where participants interact without the use of these tools. By comparing these different settings, I hope to also address the following question: Do similar kinds of social interactions, roles, and relationships emerge through verbal and nonverbal interaction within situations of technology use and non-use, or do we instead find noticeable differences across these two domains? In what follows, I classify three types of activities based on how learners use technology to accomplish the specific tasks: ABSENCE OF TECHNOLOGY USE, INTERMITTENT TECHNOLOGY USE, and HEAVY TECHNOLOGY USE. This classification will then be used to compare the interactions at the language camp to determine if social interactions diverge across different uses of digital technology.9

9 Although I distinguish between three distinct settings involving varying degrees of technology use, social interactions that take place in settings of intermittent technology use will be considered as involving or not involving technology on an individual basis.
3.2.1 Absence of technology use

Bingo Games

There were two different bingo games at the language camps. One focused on the sounds of Northern Pomo, many of which do not exist in English, such as the set of dental stops and ejectives. As such, learners also needed to learn the writing system of Northern Pomo, which consists of symbols that would likely be unfamiliar to them. For example, the ejective velar stop is written orthographically as \(<k’>\) and many learners memorized it as “the ‘k’ with an apostrophe.” The other bingo game focused on words from select semantic domains, such as cultural objects, body parts, and animals. Participants were given a set of tokens and a bingo card, which consisted of a five-by-five grid (Figure 2). Depending on which type of bingo game they were playing, each cell on the grid contained either a Northern Pomo letter or word. When the instructor played a recording of a Northern Pomo sound/word or said it out loud, participants often repeated what they heard before calling out their guess. When the instructor – Julia for the sounds bingo and Ethan for words bingo – heard the correct answer, he or she would confirm by repeating it out loud. Participants would then place one of their tokens on the cell that contained the orthographic representation of that sound/word. If, after several rounds, the tokens eventually formed a row on someone’s bingo card, then that person would raise their hand and yell, “Bingo!”

![Northern Pomo Sounds](myfreebingocards.com)

**Figure 2.** A bingo card used for the sounds bingo game
Card games

During the card games, learners formed groups of four and were given thirty-two blank cards. Each team member was then told to choose four different animals. For each animal, they were asked to write down its Northern Pomo word onto a blank card. They were also asked to draw pictures of their selected animals onto separate cards. Thus, each team ended up with sixteen cards with drawings of the sixteen different animals and sixteen cards with Northern Pomo words that corresponded to the drawings. These cards were used for two games: Concentration and Go Fish!. In Concentration, all the cards were placed facedown on the table. Players took turns flipping over two cards, and every time a card was flipped over, that person would say __ mu:l na ‘that is ___.’ If a matching pair (i.e., a drawing of an animal and the corresponding Pomo word) was found, then that person would say ?e:ah ‘yes,’ and if not, then he or she would say yi: ‘no.’ The goal of the game was to flip over as many matching pairs as possible.

In Go Fish!, each player received four random cards. If a matching pair was found, that player would again say __ mu:l na and then place the pair into the discard pile. The goal was to try and get as many matching pairs as possible. If a player was missing a card that would otherwise form a matching pair, then that person could ask a team member whether he or she has the missing card using the Northern Pomo expression __ ta mi? na? ‘do you have ___?’ If the team member was in possession of that card, then he or she would say ?e:ah ‘yes.’ If not, then he or she would say yi: ‘no’ followed by the phrase sha kanenkam ‘go fish! (lit. make the fish bite!).’ The person who made the initial request must then take one card from the discard pile and place it into his or her own hand.10

3.2.2 Intermittent technology use: Kinship terms and storybook creation

Kinship terms

The first activity of the two language camps involved learning kinship terms in Northern Pomo. Participants were given a flashcard with one side blank and the other side with a kinship term in English. Participants were asked to (a) look up the Northern Pomo word corresponding to the English word in the online audio dictionary, (b) listen to the audio recording that appears in the dictionary entry, and then (c) write the Northern Pomo word onto the blank side of their card. At the first camp, the focus was on referential kinship terms, and many people worked in groups. At the second camp, the focus was instead on the vocative forms of various kinship terms, and in contrast to the first camp, most learners worked individually. Since learners had to look up words in the online dictionary, this activity involved intermittent use of a digital device.

10 See Nee (2021) for other language games and activities that utilize the same set of cards as well as the rationale for their use within the context of language revitalization.
Storybook creation

The storybook creation activity took place at both language camps. To provide participants with the set of tools to create their own sentences during the storybook creation activities, I provided a brief lesson on several basic sentence structures in Northern Pomo, such as copular constructions. After the tutorial, Julia introduced the storybook creation activity by sharing an example of a flapbook – a book with multiple flaps – with Northern Pomo sentences written on each flap in the book (Figure 3). At the first language camp, the book she shared introduced her family members. At the second language camp, her book consisted of sentences from the Phrasicon on the Northern Pomo Language Tools website. Julia then instructed learners how to make their own flapbook. Learners at both camps worked to develop their own stories by soliciting help from the Northern Pomo website or the instructors.

3.2.3 Heavy technology use  The QR code scavenger hunt occurred at both language camps. This activity is classified as heavy technology use because of its reliance on using a mobile device or tablet to scan QR codes, which are barcodes that, when scanned, bring users to a webpage. Participants were given a worksheet with
forty-five numbered blank spaces, and each blank space corresponded to a QR code that was placed somewhere inside the building. Scanning the QR code brought users to a dictionary entry referencing an object or concept that was located within the vicinity of the QR code. For example, the QR code linking to the dictionary entry for ‘water’ was placed on the water dispenser (Figure 4), while the QR code linking to ‘sit’ was placed on a chair. At the first language camp, “everyday” words were used. At the second camp, the scavenger hunt targeted animal words, and images of different animals were placed around the classroom alongside the relevant QR code. Participants, who worked individually or in groups, were asked to find all forty-five QR codes, scan them, listen to the recordings, and write the Northern Pomo words down onto their worksheet.

Figure 4. A QR code linking to the online dictionary entry for ‘water’ on the water dispenser.

4. Theoretical frameworks The theoretical constructs I employ to study the social interactions that took place at the two Northern Pomo language camps are partici-
Shifting teacher/learner roles in language reclamation efforts relying on digital technology

Participation framework (or framing theory; Goffman 1974; 1981; Goodwin & Goodwin 2004) and positioning theory (Davies & Harré 1990; van Langenhove & Harré 1999). Because I am interested in describing and understanding the links between language use and participant roles and relationships within contexts of collaborative language learning with and without the use of technology in a language revitalization context, these concepts lend an analytic lens that would help accomplish these tasks; importantly, these constructs integrate not only the participants but also actions and events.

Participation framework is defined as the total configuration of participation statuses of a given interaction at a specific moment in time (Goffman 1974; 1981). Two particularly relevant constructs linking social interaction and participation framework are framing and footing. Framing encompasses situational definitions or, as Tannen & Wallat (1987: 206) put it, “a definition of what is going on in interaction, without which no utterance (or movement or gesture) could be interpreted.” Footing, on the other hand, involves the alignments people have toward each other and toward the content of their utterances (Goffman 1981). As frames are constructed, so too are footings or alignments. To elucidate how footings, and thus frames, come to be engendered within talk, I study the set of linguistic and paralinguistic features, referred to as contextualization cues (Gumperz 1982), that comprise them; as Gumperz (2015: 315) notes, contextualization cues are metapragmatic signs that “[serve] to construct the contextual ground for situated interpretation.”

In this paper, I employ two frames (or situational definitions) that are constructed as a result of caregivers interacting with youths at these language camps: the socialization frame, where caregivers provide injunctions on appropriate behavior, and the language learning frame, where both caregivers and youths engage in various language-learning activities. These frames were selected because in the context of the Northern Pomo language camps, caregivers often alternate between acting as agents of primary socialization and as language learners; relative to a child who is being socialized and is acting as a language teacher, the distribution of power and solidarity across these two roles (i.e., agent of socialization and language learner) is therefore in constant flux. In light of these shifting dynamics, what insights can we gain from analyzing interactions between caregivers and youths when they collaborate in joint language-learning games and activities? Indeed, caregivers may also act as language teachers for the youth, and within this capacity, these two frames can be regarded as overlapping, laminated, or layered (Goffman 1974: 82). Language learning constitutes a core aspect of a child’s socialization in them becoming a competent

---

11 Although Gumperz’s speech activity and Goffman’s participation framework differ in subtle ways, I follow Tannen (1993: 4) in understanding speech activity as a type of frame (cf. O’Connor & Michaels 1996).

12 I leave aside the conceptualization of power as formulated by Tannen (1994) in which power is intertwined with solidarity (or closeness).
language user within their community. In this study, however, I restrict the socialization frame to include reprimands and injunctions on appropriate behavior, such as admonishments on language use, so as to focus on how power is configured between the two frames.

While participation framework emerges from sociology, *positioning* developed out of social psychology as a dynamic, flexible alternative to the more static notion of role (Davies & Harré 1990; van Langenhove & Harré 1999). In particular, positioning is “the discursive process whereby selves are located in conversations as observably and subjectively coherent participants in jointly produced story lines” (Davies & Harré 1990: 48). Moreover, positioning is concerned not only with sense-making but also self-making, that is, how people discursively create identities for themselves and for others. Individuals may position themselves or be positioned; they may also challenge, reject, and negotiate the positions assigned to them and thereby be repositioned. In this paper, I use the framing/positioning model proposed by Kendall (2008: 545) in which “[p]articipants create frames by taking up and making certain positions available to others; and, conversely, participants make certain positions available through the frames they create and maintain.” Thus, within this model, framing and positioning are intimately interwoven.

To illustrate, consider the socialization and language-learning frames. Within these two frames, caregivers and youths discursively construct, take up, and assign onto others a variety of positions. For example, in the socialization frame, caregivers often monitor and manage the verbal and nonverbal behavior of youths and enforce proper etiquette (e.g., table manners, dress code, personal hygiene). As such, they take up positions that may include Language Monitor and Behavior Monitor.13 (Similar to frames, positions are not mutually exclusive and multiple positions may be taken up simultaneously.)14 In the language-learning frame, a child may position themself as Teacher and their caregiver as Student. They may also position their friend as an Assistant to aid them in their teaching. Therefore, these labels for the hypothetical positions attempt to reflect the social capacities that the participant evokes through their verbal and nonverbal interaction. Naturally, the full range of possible positions are numerous, but I focus on the ones mentioned above as they not only produce (a)symmetries of power between interlocutors but also form some of the most common and easily demarcated positions in the data.

5. Analysis The shifting power dynamics between the socialization and language-learning frames provide rich sites from which to investigate the delicate balancing

---

13 Another frequent position found in the data within the socialization frame is Rule Enforcer, who enforces the rules of a language-learning game or activity (e.g., *stop cheating!*). Due to limitations of space, I restrict the discussion to two positions – Behavior Monitor and Language Monitor.

14 One example where this might occur is a scenario where a child is yelling and tossing books onto the floor at a public library – a father’s stern directive *stop that!* can reflect overlapping positions: (a) Language Monitor (getting the child to stop yelling), (b) Behavior Monitor (getting the child to stop tossing books onto the floor), and (c) Etiquette Monitor (getting the child to acknowledge that there exists a social convention for libraries to be a space free of excessive noise).
act that caregivers often engage in. As a consequence of their interactions with youths, caregivers discursively reprise the role of agent of socialization in which they hold the power not only to judge the youths’ behavior but to also instill social skills as well as their own values in others. However, in the context of the joint language-learning activities where caregivers must cooperate with other group members, which include the same youths they may be socializing, they also endeavor toward creating and fostering a collaborative environment where power across participants tend to be more evenly distributed. To illustrate how power as a resource is distributed within the two frames, I first describe the types of stances and roles that emerge through verbal and embodied interactions between individuals within the socialization frame. Doing so allows for an important point of comparison with the language-learning frame and can provide a better understanding of how power is leveraged when caregivers work with youths to learn Northern Pomo.

Since the use of digital technology is pervasive throughout the language camps, it is important to delineate between contexts of digital technology use and non-use. The QR code scavenger hunt represents one context in which digital technology is heavily used. On the other hand, the use of technology is largely absent when, for example, learners are playing card games with each other. Note that language-learning activities classified as contexts of intermittent technology use – kinship terms and storybook creation – straddle between technology use and non-use. In the storybook creation activity, interactions may occur when learners are navigating the Northern Pomo Language Tools website, but they may also occur when learners are drawing pictures onto their books with a pencil. As such, interactions that take place during contexts of intermittent technology use are analyzed as an instance of technology use or non-use on a case-by-case basis. Across scenarios in which technology is present or absent, do we find the same frames and positionings or do we not? One possibility is that we find the same frames and positionings regardless of context; that is, the presence of technology use does not significantly impact social interactions that are embedded within learning. Another possibility is that the types of frames and positionings that emerge in one context differ in the other context. These scenarios are represented in Table 1, where A, B, C, D, E, and F represent distinct discursive frames.

---

15 See Gordon 2002, 2008, and 2009 on the complexity of frames that parents, particularly mothers, often manage in interactions with their children.
Table 1. Possible scenarios of frames and positions between contexts of technology use and non-use

<table>
<thead>
<tr>
<th>FRAME AND POSITIONING</th>
<th>SCENARIO 1: SAME FRAMES AND POSITIONINGS</th>
<th>SCENARIO 2: DIFFERENT FRAMES AND POSITIONINGS</th>
</tr>
</thead>
<tbody>
<tr>
<td>CONTEXT 1: ABSENCE OF TECHNOLOGY USE</td>
<td>A, B, C</td>
<td>A, B, C</td>
</tr>
<tr>
<td>CONTEXT 2: PRESENCE OF TECHNOLOGY USE</td>
<td>A, B, C</td>
<td>D, E, F</td>
</tr>
</tbody>
</table>

Based on my analysis, I show that the socialization and language-learning frames, as well as many of the same positions that are associated with them, appear regardless of whether technology use is present or absent. In addition, while caregivers exhibit conversational moves that are regarded as power maneuvers, such as reprimands and injunctions within the socialization frame, the configurations of power are redefined within the language-learning frame. Notably, youths often negotiate for positions of power, taking up the position of Teacher and positioning their caregivers as Student; in these cases, power is co-constructed as the caregiver must also surrender some of their authority to the youth. Indigenous youths play an important role in language revitalization efforts since they represent the future generations of learners and language activists (Wyman et al. 2016); the use of digital tools has been particularly useful in this regard (see, e.g., Ward 2004; Galla 2009; 2018; Putra 2018; Lillehaugen 2019). Therefore, studying how youths are supported and empowered when learning their heritage language can lead to insights that may be especially useful in other revitalization contexts.

5.1 Social interactions situated in technology non-use

5.1.1 Socialization frame Caregivers play an important role of monitoring and managing the verbal and nonverbal behavior of youths. At the camps, this includes enforcing and maintaining appropriate behavior when youths participate in the various language games and activities. In other words, caregivers are tasked with socializing youths, and any deviation from what might be deemed as appropriate and acceptable behavior is accompanied by reprimands and admonishments. Here, I describe two positions caregivers take up within this frame: Language Monitor and Behavior Monitor.\(^{16}\)

During the words bingo game at the second language camp, Northern Pomo words are called out by the instructor, Ethan, and learners often draw parallels with English words that sound similar. For example, the English word *self* was concatenated onto the Pomo word *shiʔemay* ‘bow (and arrow)’ to resemble the English expression *shitting myself*:

---

\(^{16}\) The two interactions given here are part of nineteen instances of social interactions in the overall data set that occur within the socialization frame and within contexts of technology non-use.
(1) Words bingo game

1  Ethan: The next one, shiʔemay (‘bow (as in bow and arrow)’).
2  Adam: shiʔemay.
3  Sam: shiʔemay self shiʔemay [self.
4  Erica: [Don’t say that!

[NP_060319_000.wav: 2:26:17–2:26:26]

In line 4, Erica admonishes her son, Sam, for his profanity (line 3) instead of repeating the word verbatim as the adult learner, Adam, does (line 2).\textsuperscript{17} Here, Erica takes up the position of a Language Monitor, tasked with addressing inappropriate verbal behavior. She does this by issuing a prohibitive imperative, which is accompanied with exaggerated intonation, and by interrupting her son’s reprise of the vulgar expression (line 4). By controlling how her son should be pronouncing the Pomo words, Erica takes up a more powerful position in relation to Sam.

If the Language Monitor maintains appropriate verbal behavior, then the Behavior Monitor addresses nonverbal behavior. Excerpt (2) occurs at the first language camp during the storybook creation activity and features a mother, Melissa, and her teenage daughter, Daniella. Since the start of the activity over half an hour ago, Melissa struggles (unsuccessfully) to have her daughter participate in the activity:\textsuperscript{18}

(2) Storybook creation activity

1  Melissa: Write it in Pomo and it will be acceptable. It’ll be acceptable if you write it in Pomo! Write it in Pomo! ((recoils her hand))
2  Daniella: ((fires the stapler into the air))
3  Melissa: NO! Oh! ((flinches and recoils her hand)) My god! Give me the stapler! Put the stapler down! ((takes the stapler and puts it on the table)) Write it in Pomo and I will accept it as (xx)!

[MVI_0172.mp4: 5:45–6:11]

In an effort to gain control of the situation and to maintain order, Melissa employs sequences of explicit directives (lines 1 and 3). By positioning herself as

\textsuperscript{17} Names of all participants at the language camps that appear in this paper, except for the instructors, are pseudonyms.

\textsuperscript{18} Since arriving at the language camp, Daniella has been reluctant to participate in any of the language-learning activities. On multiple occasions, she expressed that she did not want to be at the camp, nor did she want to learn to speak Northern Pomo. At one point, she even tried looking up the phrase ‘I want to go home’ in the corpus of Northern Pomo sentences and phrases to no avail.
Behavior Monitor, Melissa attempts to maintain control of her rebellious teenage daughter whose embodied actions (and inaction) serve to challenge Melissa’s more powerful position. Therefore, the power struggle between the mother and her teenage daughter demonstrates the teenager’s objection and resistance to the dominant power structures within the family organization and again paints a vivid picture of how positions are assigned and even challenged.

5.1.2 Language-learning frame  Within the language-learning frame, we find that caregivers often take up the position of Teacher and assign the position of Student onto youths. In addition, we also find the reversal of these two positionings; that is, youths also take up the position of Teacher while positioning their caregiver as Student. This is similar to what Hermes & King (2013: 131) describe as an “inversion of established parent-child roles” that language learning entails when children exhibit higher language and/or computer competences than their parents.19

During the Go Fish! card game at the second language camp, learners play in groups of four as the instructors circulate the classroom. In (3), Julia, one of the instructors, is standing next to a group consisting of three girls (ages 11, 14, and 21) and an Elder. Julia observes and provides assistance whenever appropriate, such as through corrective recasts in which she corrects the students’ response by paraphrasing it. The interaction in (3) features Tessa (a fourteen-year-old teenage girl), Emily (a female Elder), and Julia. As Julia assists Tessa, Emily respeaks (or in Goffman’s terms, *animates*) the instructor’s words either completely or partially – an example that illustrates what Bakhtin (1981) calls *authoritative discourse*, an acknowledgment of the instructor’s words as authoritative at the language camp.

(3) Go Fish! card game

1 Tessa: Wait is that, is that mean no?
2 Julia: yi:: is no.
3 → Emily: [yi:: =means no.
4 Tessa: yi::
5 Julia: So what do you say?
6 → Emily: =So what do you say?
7 Tessa: sha kanenam.
8 Julia: Awesome.


Beginning in line 5, Julia and Emily introduce one of the most common and oldest discourse patterns found in traditional classroom discourse – the tripartite

---

19 There are thirty-two instances of social interactions in the data total that take place within the language-learning frame and within contexts of technology non-use. Within fifteen of these interactions, caregivers take up the position of Teacher and youths take up the position of Student; the remaining seventeen interactions comprise caregivers and youths being positioned as Student and Teacher, respectively.
Initiation-Response-Evaluation (IRE) or Feedback (IRF) sequence (Cazden 2001). In an IRE sequence, the teacher initiates, such as through questions or declarative statements, the student responds, and the teacher provides an evaluation of the student’s response. For example, in (3), Julia and Emily’s questions (lines 5–6) acts as an Initiation, Tessa then provides a Response (line 7), and, finally, Julia offers an Evaluation (line 8).

By respeaking and minimally paraphrasing Julia’s words (lines 3 and 6), Emily shifts her footing and alignment with Julia and Tessa. Emily imitates the instructor and positions herself as the Teacher with Tessa as the Student (just as Julia does). She accomplishes this in two ways: overlapping with (line 3) and latching onto (line 6) Julia’s speech, which also demonstrate Emily’s solidarity with her (Zupnik 2000). Essentially, Emily reinforces Julia’s authority and her scaffolded assistance to Tessa. In doing so, Emily also aligns herself with Julia and positions herself as Assistant to her. Thus, as a caregiver to Tessa, Emily can be viewed as providing her with assistance, which in turn renders Emily in the position of Teacher and Tessa as Student.

The power relations between Julia, Emily, and Tessa can be described as follows. As Teacher, Julia holds more epistemic rights and authority (Heritage & Raymond 2005) than both Emily (Assistant) and Tessa (Student). However, as Assistant, Emily acquires more power by respeaking the words authored by Julia. As a result, Tessa holds less power than either Julia and Emily. The following interaction demonstrates how power can be redistributed to youths such that they appear to hold greater authority than their caregivers.

During the kinship term activity at the first language camp, instructors walk around the classroom while learners work in groups of two to six. Excerpt (4), which features the same mother and daughter in (2), takes place twenty minutes into the activity. Earlier, Daniella has been helping to look up words in the talking dictionary. However, she refuses to repeat any of the Pomo words. When all the relevant words are located, Daniella browses through the talking dictionary (lines 1–7) while Melissa practices saying the Pomo words out loud. Shortly after, a fellow adult learner, Amanda, who is seated at the same table, retrieves the laptop from Daniella. Without a digital device, Daniella browses through the deck of flashcards with various Northern Pomo kinship terms written on them.
Shifting teacher/learner roles in language reclamation efforts relying on digital technology

(4) Kinship term activity

1 Melissa: ʔa:mi-, ʔa:mi-, ((to the instructor)) how do you say it?
2 Julia: ʔa:mi, this is pʰa.
3 Melissa: pʰane?
4 Daniella: ((looks up from her laptop))
5 Melissa: ʔa:mi- ((looks at Daniella)) pʰane (('my daughter')). Do you want to practice? @@@
6 Daniella: ((looks at her mother, but does not verbally respond))
7 Melissa: @@@@@@@@@@
8 Amanda: ((takes the laptop away from the teenager)) ...
9 → Daniella: ((looks at a flashcard)) What is that?
10 → Melissa: Um, that's 'my daughter.' ʔa:mi-tʰe (('my mother')), pʰa-pʰane.
11 → Daniella: ((looks at her mother)) That's not how you say it.

[MVI_0153.mp4: 3:06–4:17]

By asking the instructor, Julia, for clarification on the sounds of ʔa:mi-pʰane 'my daughter,' Melissa positions herself as Student (lines 1–3). As soon as Daniella gazes up from the laptop (line 4), Melissa playfully extends an invitation to her to practice speaking Northern Pomo. Although framed as a question, Melissa’s ostensible invitation (Isaacs & Clark 1990) followed by her laughter suggests that this interaction is one of teasing: Melissa is well aware of Daniella’s reluctance to join her in practicing to speak Northern Pomo, demonstrating the intimacy and distribution of power in their relationship. However, Daniella’s silence speaks volumes (line 6) and serves to challenge her mother’s authority and attempts to rally collaboration, even as Melissa strategically uses the Pomo word ʔa:mi-pʰane ‘my daughter’ to accomplish these tasks.

Soon after the laptop is taken away from Daniella, she quizzes her mother on one of the flashcards. The exchange in lines 9–11, where Daniella inquires, Melissa responds, and Daniella comments, resembles the canonical triadic IRE sequence. Thus, Daniella positions herself as Teacher by testing her mother on the flashcards (line 9), while also positioning her mother as Student whose response ʔa:mi-tʰe 'my mother' (line 10) is subsequently evaluated (line 11). By providing an evaluation of Melissa’s incorrect pronunciation of the Northern Pomo word for ‘my daughter,’ it is strongly implied that Daniella knows how the word should be pronounced. This strong epistemic stance is particularly surprising given Daniella’s overt disinterest in the activity and suggests that while she may not be actively participating in the language activities, she still acquires knowledge of the language passively through her presence at the camp. In this way, Danielle takes up a more powerful position in relation to her mother, and the mother’s response serves as a display of acquiescence.
Shifting teacher/learner roles in language reclamation efforts relying on digital technology

in being positioned with less authority.20

Finally, while we find occurrences of youths providing explicit feedback to their caregivers, we also find them providing implicit corrective feedback, such as through recasts:

(5) Go Fish! card game

1  Adam:  yi: sha kanenken.
2  Sam:  Oh, kam.
3  Adam:  kam.

[NP_063019_000.wav: 2:02:17–2:02:19]

In line 1, the pronunciation given by Adam, an adult learner, of the formulaic expression ‘go fish’ as sha kanenken is immediately followed by Sam’s recast; that is, Sam provides a correction of Adam’s pronunciation by repeating the erroneous segments in its proper form kam (line 2). In particular, Sam indicates implicitly that rather than kanenken, the word should be pronounced as kanenkam. Adam notices his mistake and repeats the corrected form that Sam provides (line 3). In doing so, Sam positions himself as Teacher and Adam as Student. By repeating the corrected form, Adam willingly accepts the position that Sam assigns him. Once again, power is co-constructed and distributed unevenly in the temporally unfolding interactions between the two participants.

5.2 Social interactions situated in technology use

5.2.1 Socialization frame The use of digital tools, such as mobile and tablet devices, is central during the QR code scavenger hunts. What we find within these contexts of heavy technology use is the emergence of the socialization frame through verbal and nonverbal interactions. In (6), Adam and Sam have just scanned a QR code when Sam suggests moving to that tree shown in Figure 5.21

---

20 For the first part of the kinship term activity, Daniella can be seen browsing the Northern Pomo Language Tools website. Shortly after the interaction in (4), with the laptop removed from her possession, Daniella’s gaze is, for the most part, fixed to her phone until the end of the activity – a full fourteen minutes. By focusing her gaze onto the laptop and phone screens, Daniella performs the unmotivated and disinterested learner while her mother actively participates in the language activity by writing words onto the flashcards. However, Daniella’s ability to provide an (accurate) evaluation of her mother’s pronunciation appears to challenge this facade. In fact, this was pointed out by Erica Carson Jr., an instructor at the camp, who at the end of the first language camp made the following observation: “she [Daniella] was actually listening even though we thought maybe she wasn’t and I know that you [Daniella] heard things that were going on today and I appreciate you [Daniella] being here” (MVI_0174.mp4: 27:15–28:26).

21 In the data, there is only one other instance of social interaction that takes place within the socialization frame in a setting where digital technology is being used. Despite the low count of these types of interactions, the fact that the socialization frame does manifest when technology is being used is still significant. In addition, contexts of technology non-use are far more numerous than contexts of technology use.
(6) QR code scavenger hunt

1  Sam:  We should finish that tree.
       There’s [a bunch of stuff on that tree.

2  Adam:  [Well let’s just finish this first
       [and then we’ll go over to the tree.

3  Sam:  [(H) Okay.

[NP_062919_001.wav: 11:07–11:13]

Sam’s utterance in line 1 carries a deontic flavor; he is keen on moving to a different site where multiple QR codes are located. Adam interrupts and produces an explicit injunction on Sam’s impatience (line 2). Adam’s interruption with well, which renders nonalignment with Sam and his suggestion, is followed up with a directive via hortative let’s to indicate that they should instead finish the task at hand. Through these interactions, Adam positions himself as Behavior Monitor, and his directive and nonalignment entail the authority he upholds vis-à-vis the child. Ultimately, Sam cedes (line 3) – his audible inhalation signals his frustration and reluctant agreement. Therefore, the distribution of power remains the same within the socialization frame regardless of whether digital technology is used.

Figure 5. A QR code linking to the online dictionary

---

22 Sam’s restlessness and eagerness to move onto the next QR code is visible in the videos throughout the QR code scavenger hunt – Sam can be seen to occasionally dance, fold and unfold pieces of paper, and pace back and forth while he waits for Adam to write down the words onto their worksheet.
5.2.2 Language-learning frame  In addition to explicit injunctions on verbal and nonverbal behavior that caregivers often provide to youths, we find caregiver-initiated IRE sequences during the QR code scavenger hunts. Excerpt (7) features the same adult-child pair at the second language camp, Adam and Sam, who are discussing the QR code labeled #29.23

(7) QR code scavenger hunt

<table>
<thead>
<tr>
<th></th>
<th>Adam:</th>
<th>Sam:</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Number twenty-nine.</td>
<td>Wait let’s, we should...It’s hayu, twenty-nine.</td>
</tr>
<tr>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4</td>
<td></td>
<td>Good job.</td>
</tr>
</tbody>
</table>

Adam locates the QR code labeled #29 (line 1), and Sam, who is eager to move on, informs Adam that the word associated with that QR code is *hayu* ‘dog’ (line 2). In an effort to assuage Sam’s restlessness, Adam quizzes Sam on the spelling of the word in line 3 (Initiation), which he prefices with *but* to signal digression from the previous discourse or action – Sam’s keenness to move on – and a return to the current task (Schiffrin 1987; Bell 1998). Sam spells the word correctly (Response, line 4), and Adam praises him (Evaluation, line 5). Through the IRE sequence, Adam once again positions himself as Teacher and Sam as Student.

In fact, we also find youths taking up the position of Teacher while assigning their caregivers the position of Student during the QR code scavenger hunts. Excerpt (8) takes place at the first language camp and features the mother-son dyad, Miranda and Sean. Sean has just scanned a QR code associated with the dictionary entry to the Pomo word *shaba:din* ‘teaching’ and then plays a recording of Edna Campbell Guerrero, one of the last fluent, first-language speakers of Northern Pomo, saying that word. Meanwhile, Miranda is leaning over the table preparing to write down the words on their worksheet.

23 In total, eight instances of social interactions occur within the language-learning frame and in a setting where technology is used. In two of these instances, caregivers and youths take up the position of Teacher and Student, respectively, whereas in the other six instances, these positions are reversed.
QR code scavenger hunt

1 Sean: ((presses the play button on the touchscreen on the phone))
     ((orients the phone at an angle toward his mother))


3 Miranda: [shaba:din.

4 → Sean: sha[BA:din, [with that ‘n’ just.

5 Miranda: [((mother glances at the entry))

6 Edna: [shaba:din.

7 → Sean: ((points at the dictionary entry)) [((retrieves his index finger))

8 Miranda: [((gazes back to the worksheet))

9 Sean: shaba:din.

10 → Miranda: [((mother gazes back down onto the worksheet))
     ((mother gazes to the phone))
     What’s that? Teaching?
     ((mother gazes down onto the worksheet))

11 → Sean: Yeah.

After Edna Guerrero says the word shaba:din (line 2), Miranda repeats it (line 3). Sean then provides feedback on his mother’s pronunciation of shaba:din ‘teaching’ (line 4). First, he points out segments that are at issue through the use of emphatic stress (shaBA:din), which draws Miranda’s gaze toward the screen (line 5). Second, after saying with that ‘n’ just, Sean points, using his index finger, at the written form displayed in the dictionary entry on the phone (line 7). As he pulls back his finger, Miranda gazes back down onto the worksheet (lines 7–8). Then, Miranda returns her gaze to the phone, and Sean repeats the Pomo word once again (lines 8–9). Once the sounds of shaba:din have been established, Miranda requests clarification on the meaning of the word (line 10) and Sean confirms (line 11).

By providing implicit and explicit feedback to the mother, Sean positions himself as Teacher and his mother as Student. Similar to contexts where technology is largely absent at the language camps, youths can be seen to garner greater authority when collaborating with their caregivers. These uptakes in positionings are facilitated not only through talk but also through the spatial positions and orientations of Miranda, Sean, and the digital device. Throughout the interaction, Miranda is leaning over the table with the worksheet while her son is standing directly next to her with the phone in his hand. Because Sean controls the mobile device, he is centrally located within the language-learning context; he has crucial information about the Northern Pomo words. Conscious of this, Sean orients the phone so that his mother is able to view the contents of the dictionary entry herself. This mutual cooperation between the mother and son are embodied not only through speech but also through sequences of bodily actions that include eye gaze, gesture, and interaction with the
To summarize, what my analysis suggests is within language-learning frames, youths sometimes take up positions of authority – the position of Teacher. At the same time, caregivers submit themselves to being positioned in a less powerful role – the Student. Moreover, the use of digital technology at the Northern Pomo language revitalization camps does not seem to affect social interactions and interpersonal relationships when participants are learning about the language; similar frames, positionings, and power configurations emerge regardless of whether digital technology is being used. That said, there are a few sites where digital technology is at the heart of contention, particularly between caregivers, who are Elders, and youths. In the following section I turn to one such interaction.

5.2.3 Conflict  At the start of the QR code scavenger hunt during the first language camp, a group – consisting of two Elders, Emily and Ellen, and a twenty-one-year-old female youth, Yvette – attempts to scan their first QR code. Emily is in charge of scanning the QR codes but is not having any success, much to Yvette’s frustration.24

(9) QR code scavenger hunt

1 Emily: ((looks down at the tablet, puzzled)) Now how do I go back? I want to go to the main menu. She said to go-

2 Yvette: I don’t want to sp- spend my whole life here. QR, ugh...Oh my god I’m gonna download it. You’re slow.

3 Emily: I just don’t know how to go back to the thing! You just told me to push the thing and then when I pushed it, it didn’t do it!

4 → Yvette: Then you shouldn’t (xx). (Hx) we’re never going to do it, (xx) you doing it (x). ((speaks softly)) (xx), I’m going to my uncle. ((turns around and begins to walk away))

5 → Emily: Well, you made me use this! I don’t know how to get to it.

6 → Yvette: Well, give me it! ((Emily hands over the tablet)) You just- ((teenager scans the QR code and the tablet beeps))

7 → Emily: See ((looks at Ellen)), they know how to get back to it.

24 The interaction between the youth and Elders here is one of three conflicts that involves using digital technology in the data, suggesting that while contentions do arise, they appear to be infrequent. Despite their rarity, any conflict that manifests should ultimately be addressed.
As the Elders grapple with the tablet (line 1), Yvette becomes increasingly impatient (line 2). She employs the hyperbole *I don't want to spend my whole life here* to convey her annoyance before declaring that she will download the QR code scanner app herself, suggesting that she plans on working on her own. Emily voices her frustrations using the tablet despite the instructions provided by the youth (line 3). Again, Yvette produces another hyperbole *we're never going to do it* and then abruptly announces her departure from the group (line 4). It is revealed by Emily that the source of the frustration for both parties lies with the youth herself (line 5). In response, Yvette tells Emily to hand over the tablet (line 6). Once the tablet is handed over to her, she scans the QR code and Emily’s use of the pronoun *they* (line 7) references youths in general to acknowledge the gap in technical know-how between them as Elders.

With Yvette in charge of scanning the QR codes, the group is now able to continue with the main tasks of the QR code activity. However, not long after the interactions in (9), Yvette moves onto the next QR code without waiting for the Elders to write down the words onto their worksheet. This prompts Emily to comment *we're too slow for her*, which contrasts the pace between the Elders and the youth. While Yvette’s familiarity with these digital devices places her in the center of language-learning activities – and thus, with greater control – it does so at the expense of both Emily and Ellen. Eventually, Yvette ventures out on her own to scan the other QR codes while the Elders sit back down and wait for the activity to end. Overall, the interactions in (9) demonstrate the inability of the Elders to keep up with the pace of the tech-savvy (and more mobile) youth.

6. Discussion
By studying the types of speech acts, gestures, framing, footings, and positionings that emerge within the Northern Pomo language revitalization context, we find that instructors and caregivers are not the only ones who take up the position of Teacher – youths may discursively construct this position for themselves too. On the one hand, the inversion of Teacher/Student positionings, which entails a reallocation of power between caregivers and youths, may be viewed as potentially disruptive to pre-existing relationships. Yet in order to endeavor toward collaboration and conflict-avoidance with youths (Ochs & Kremer-Sadlik 2015), caregivers must also willingly relinquish some of their authority to create a space for the youth to take up the position of Teacher – without a student, there is simply no teacher. Thus, the collaboration between caregivers and youths that is required in the joint activity of language learning demonstrates the intricate social and power dynamics that are sustained not only when learning takes place when digital technology use is largely absent, but also when digital technology is a crucial part of the learning activity.

25 While the interaction between the two Elders and the youth in (9) fosters an environment that can be particularly intimidating and divisive, these kinds of conflicts do not always occur. We sometimes do find collaboration between Elders and other youths in settings where digital technology is used. At the second language camp, a teenage girl who is tasked with operating the phone is seen assisting the Elder during the QR code scavenger hunt. She does this not only through talk when responding to the Elder’s requests for information but also through embodied actions, such as extending her arm with the digital device in her hand to the Elder’s eye level to allow the Elder to view the dictionary entry.
Yet as youths position themselves as Teacher and acquire a greater amount of authority relative to their caregivers, youths are also placed in the center of the language-learning activity. Upon scanning the QR codes during the scavenger hunt, they provide adults with information about the Pomo words with their digital device. In the Go Fish! card game, they provide clarification and corrective feedback on such things as pronunciation of Northern Pomo words. In other communities where there are few or no remaining speakers, youths have been reported to be among those who are most engaged in language revitalization efforts. For example, in his study of youth involvement in language revitalization in Indonesia, Putra (2018) finds that positioning the youths as a resource and building on their skills with contemporary technological tools can actually encourage and help them to learn, use, and advocate for their languages. In this way, inversions of position – and power – may be seen as a welcoming and, perhaps, important aspect of the language revitalization endeavor.

Although individuals, usually adults, may choose to work on their own during the QR code scavenger hunt, younger learners often work together with their caregivers. Within these groups, tasks are divided among both members. With only a single exception, youths who paired up with their caregivers at the camps were responsible for scanning the QR codes, while their caregivers were tasked with filling in the worksheet. In her discussion of talk between two boys playing a computer game, Cazden (2001: 125) notes that in interactions at the computer, the “division of labor is more definite” than interactions at a table with other resources. As digital natives – people who are brought up using digital technologies from an early age – it is not a coincidence that youths are often given the responsibility of using the digital tool. Their expertise puts them in a likely position to lead activities that rely heavily on the use of digital technology. In fact, as Ochs & Schieffelin (2012: 4) point out, “while many socializing situations involve older persons as experts and younger persons as novices, the reverse is also commonplace, especially as rapidly changing technologies and fresh perspectives render older modus operandi and ways of thinking inadequate.” Therefore, successfully tapping into the skills of each individual may help build and support collaborative relationships.

In contrast to the many instances of collaborative learning between youths and caregivers during the various learning activities that involve the use of digital tools, digital technology may itself be a source of conflict. How might we prevent these kinds of situations from happening in the first place? One way is to provide technology training to those in need of it so that they can be successful in using the digital devices themselves. Galla (2016: 1145), quoting a survey respondent, writes that “[t]echnology is too often a part of the ‘[technical] fix’ syndrome, where a glitzy technology tool receives its glory while under development, but when released little priority is given to training in its use.” Therefore, appropriate and adequate training is crucial whenever new language-learning resources are introduced. Second, Elders can be paired with members of the community who are more willing to go at the pace of the Elders and who are willing to provide support. Third, the activities themselves

---

26 See also McCarty et al. 2009 on how involving youths in language policy decisions can empower them to become vested stakeholders in the language reclamation process.
could be adapted to better suit the needs of Elders so that they feel more valued and included. Whatever ‘fix’ is implemented should take into consideration the long-term impacts so that it permanently rather than temporarily resolves the issues.

As we have seen, language revitalization contexts, such as the Northern Pomo language revitalization camps, are particularly rich sites to study family discourse. While these camps serve as places to learn one’s heritage language, they also constitute community-gathering events and are intimately linked to community, family, and cultural values. In the case of Northern Pomo, these language camps place caregivers and youths on the same playing field with regard to learning Northern Pomo since all participants are essentially beginning learners. Therefore, neither party is seen as an expert of the language, potentially reconfiguring the traditional power dynamics within the family. Finally, the language games and activities alongside digital technologies and their varying degrees of use offer different perspectives from which to study how they may be affecting discourse patterns and social interactions within the family unit.

7. Conclusion Attention to the moment-by-moment interactions between caregivers and youths reveals insights into how power and authority come to be negotiated and co-constructed. It also reveals the intricate details of the dynamic nature of power ebbing and flowing as caregivers navigate across a range of fluid roles. As agents of the youths’ socialization, they are afforded the power to enforce what they deem as appropriate behavior. As collaborators in the language-learning activities, they impart some of their own authority to the youths. In this way, power can be conceived as a resource in language revitalization that can be leveraged to support and empower youths. Although I have regarded socialization and language learning as separate units in my analysis, it can be argued that they in fact represent two sides of the same coin. Under this view and because Indigenous youths may feel shame about their own language (Dorian 1998), youth empowerment is not only an important aspect of the language reclamation movement but also a fundamental part of language socialization more generally (Meek 2007; 2012). Thus, by taking up the powerful position of Teacher at these language revitalization camps, youths are not passive recipients of socialization; rather, youths actively shape the process of their own socialization (Schieffelin & Ochs 1986; Garrett & Baquedano-López 2002; Kulick & Schieffelin 2004; Ochs & Schieffelin 2012).

As digital technology becomes even more integrated into our everyday lives, we become more acclimated and better attuned to its presence to the extent that our social interactions remain largely unaffected. This can be seen by how similar frames and positions are maintained in contexts of technology use and non-use. Yet within the broader public discourse, a number of social researchers have argued that digital technology can in fact be quite divisive (e.g., Putnam 2000; McPherson et al. 2006; Turkle 2011; 2015; Alter 2017). As I have shown, conflicts do sometimes occur. Therefore, it is important to pay close attention to not only how digital tools are utilized in language revitalization but also to the effects they may bring about (Galla 2009; Hermes et al. 2016; Ward 2018). As Gee & Hayes (2011: 4–5) succinctly put it, “technologies have effects only in terms of how, when, where, and why they are
put to use. They have different effects in different contexts of use.” By building our knowledge of how current technologies are implemented and employed within language revitalization, not only can we obtain an understanding of how to use them more effectively, but we may also hopefully anticipate and predict how to appropriately incorporate new tools as they emerge.

References

Shifting teacher/learner roles in language reclamation efforts relying on digital technology


Meek, Barbra. 2012. We are our language: An ethnography of language revitalization in a Northern Athabaskan community. Tucson: University of Arizona Press.


Appendix A. Transcription conventions

. falling, or final, intonational contour followed by noticeable pause
? rising intonation followed by noticeable pause
, ‘continuing’ intonation
! animated tone
- self-interruption
: elongated syllable, additional colons indicate longer elongation
CAPS emphatic stress
→ significant part of the transcript
... noticeable pause
... ellipsis, parts omitted
/// phonetic transcription
(H) audible inhalation
(Hx) audible exhalation
@ laughter
(() researcher’s comments
(x) indecipherable syllable
= ‘latching,’ no discernible pause between one speaker and the next
[ separate left square brackets, one above the other on successive lines with utterances by different speakers, indicates onset of conversational overlap

Edwin Ko
eddersko@berkeley.edu
orcid.org/0000-0002-8275-9859

Language Documentation & Conservation Vol. 16, 2022