

# Haydom Language Documentation Training Workshop - January 2020: A Report

Andrew Harvey <andrewtharvey@gmail.com>

Richard Griscom <rgriscom@gmail.com>

Photo credit: Nadia Jassim

## Introduction

The language documentation training workshop (herein “the workshop”) was a 5-day gathering whose main goal was to train native speakers of the Tanzanian languages Ihanzu and Hadza (the “trainees”) to independently conduct ethical audiovisual language documentation in their own communities. The workshop was organized by Andrew Harvey and Richard Griscom, two linguists based at Leiden University, and was funded as part of their postdoctoral research fellowships: Harvey’s “Gorwaa, Hadza, and Ihanzu: Grammatical inquiries in the Tanzanian Rift Valley Area” (ELDP IPF0285) and Griscom’s “Documenting Hadza: language contact and variation” (ELDP IPF0304). Much of the teaching was done by Stephano Edward, Festo Massani, Christina Gwa’i, and Paschal Bu’ú: four native speakers of Gorwaa whom Andrew Harvey had trained and employed in “The Gorwaa indigenous-led language documentation project”, a previous project with similar aims. The workshop was also attended by Maarten Mous, professor of African Linguistics at Leiden University (and Griscom and Harvey’s supervisor); Michael Karani, director of the Centre for Communication Studies at the University of Dar es Salaam; Augustino Amos Kagwema, lecturer at Mkwawa University College of Education; and Iraqw language researcher and activist Basilisa Hhao.

Harvey and Griscom’s postdoctoral projects are designed to collect large amounts of audiovisual language data for Hadza and, in Harvey’s case, also for Ihanzu. Stemming from documentary work conducted in previous years, it was decided that the majority of this new language documentation be carried out by ‘local researchers’. Under this model, the linguist is more of a facilitator. Indeed, given the proper training, a community member can do essentially anything that a linguist can do: collect data, collect metadata, transcribe and translate recordings, as well as decide what to record and how to record it. Ensuring that the invited participants have some grounding in these skills was what the workshop was about.



*Festo Massani*



*Stephano Edward*



*Christina Gwa'i*



*Paschal Bu'ú*



*Richard Griscom (left) and Andrew Harvey (right)*

## Schedule

Monday, January 13th: Pre-training

Tuesday, January 14th: Workshop day 1

- Breakfast
- Workshop opening
- Introduction to language documentation and preservation

8:00AM-9:30AM  
9:30AM-10:00AM  
10:00AM-11:00AM

-Personal introductions	11:00AM-12:00PM
-Lunch	12:00PM-1:30PM
-Introduction to ELDP projects	1:30PM-2:00PM
-Planning recordings and research	2:00PM-2:45PM
-Enlisting participants	2:45PM-3:30PM
-Review	3:30PM-4:15PM
-Obtaining Consent	4:15PM-5:00PM
-Work schedule and payment scheme	5:00PM-6:00PM
-Dinner	6:00PM-
-Post-meeting and debrief with teachers	7:00PM-8:00PM

Wednesday, January 15th: Workshop day 2

-Breakfast	8:00AM-9:30AM
-Equipment overview	9:30AM-10:00AM
-Audiovisual recording	10:00AM-10:30AM
-Audio equipment	10:30AM-11:15AM
-Video equipment	11:15AM-12:00PM
-Lunch	12:00PM-1:30PM
-Recordings: Activity A	1:30PM-2:30PM
-Metadata collection	2:30PM-4:00PM
-Recordings: Activity A Feedback	4:00PM-4:30PM
-Writing Systems	4:30PM-6:00PM
-Dinner	6:00PM-
-Post-meeting and debrief with teachers	7:00PM-8:00PM

Thursday, January 16th: Workshop day 3

-Breakfast	8:00AM-9:30AM
-Recordings: Activity B	9:30AM-12:00PM
-Lunch	12:00PM-1:30PM
-Basic computer skills	1:30PM-5:30PM
-Recordings: Activity B Feedback	5:30PM-6:00PM
-Dinner	6:00PM-
-Post-meeting and debrief with teachers	7:00PM-8:00PM

Friday, January 17th: Workshop day 4

-Breakfast	8:00AM-9:30AM
-Recordings: Activity C	9:30AM-11:30AM
-Group Photo	11:30AM-12:00PM
-Lunch	12:00PM-1:30PM
-ELAN	1:30PM-4:30PM
-Data Backup	4:30PM-5:30PM
-Recordings: Activity C Feedback	5:30PM-6:00PM



-Dinner 6:00PM-  
-Post-meeting and debrief with teachers 7:00PM-8:00PM

#### Saturday, January 18th: Workshop day 5

-Breakfast 8:00AM-9:30AM  
-Recordings: Activity D 9:30AM-12:00PM  
-Lunch 12:00PM-1:30PM  
-Recordings: Activity C Feedback 1:30PM-2:30PM  
-Questions and discussion 2:30PM-6:00PM  
-Dinner 6:00PM-

## Day-by-day Account

### Sunday, January 12th

- *Gorwaa teachers arrive in the late afternoon and are shown their accommodations. Group meal together in the evening.*

### Monday, January 13th: Pre-training

*"In my opinion [to improve we need] enough preparation for us teachers. At least two days before the participants arrive."*

-Teacher Christina Gwa'i

- Linguists and Gorwaa teachers meet to review schedule and to discuss individual tasks. Special care was given to talk about working with the Hadza participants, who, in popular Tanzanian imagination are sometimes likened to animals. Time was given to talk about the past treatment of the Hadzabe people, current issues facing their community, as well as the systemic disadvantages that result. Very quickly, the teachers identified similarities with their own Gorwaa community and discussed ways they could make sure they were teaching and working with the Hadza participants in an appropriate manner.

*"This was my second time with the Hadzabe people and it was a good opportunity to continue learning about them and, truly, I have made many good friends. Before I met [the Hadzabe people], I had an understanding of them that was not correct. It's through this language research that I had the chance to meet with [Hadzabe people] both times, and to become familiar with them."*

-Teacher Stephano Edward

- Ihanzu and Hadza participants arrive during the day and are shown their accommodations. Surprisingly, two additional Hadza-speakers arrive, under the impression that they too would also be employed as part of the project. After some discussion and emergency budgeting, Richard and Andrew decided that the two participants can be accommodated and employed using old equipment and with a smaller number of hours. This is explained to the prospective participants and they agree. Group meal together in the evening.

*“Whether it was due to an earlier miscommunication with one of the villages we had visited, or whether it was a result of some assertive competition between communities, the arrival of our two additional Hadza trainees was entirely unexpected. Given that they had arrived with expectations of equal treatment, and that Richard and I had limited budgets, this was also very scary: we did not want to disappoint these new trainees, or upset their home community, who had made it clear to us in the past that they felt ignored and misrepresented by outside researchers, but at the same time, we simply did not have enough money or equipment to expand our project by two new local researchers. Ultimately, our decision to accommodate these trainees, and to hire them in a slightly limited capacity, was down to our desire to ensure their community was represented in a way in which they wanted. The small collection of old equipment from previous projects also helped - without which it would not have been possible to include them.”*

-Organiser linguist, Dr. Andrew Harvey

## Tuesday, January 14th: Workshop day 1

- Breakfast 8:00AM-9:30AM
- Workshop opening 9:30AM-10:00AM
  - *Opening words from Andrew*
  - *Procedural notes (format of workshop, practicalities, etc.) from Richard*
- Introduction to language documentation and preservation 10:00AM-11:00AM
  - *In-depth introductions from Richard and Andrew;*
  - *Introduction to ‘What is Linguistics?’ from Andrew. Linguistics is not just learning about individual languages, but learning about language as a system. Linguistics can teach us about human cognition, history, etc.*
  - *Introduction to language endangerment from Richard. Projections for language death for the next century; common causes of language endangerment; what communities, linguists, and the general public stand to lose when a language goes dormant.*
  - *Discussion of language documentation and language preservation from Andrew and Richard. These are essentially two responses to language endangerment, and there are big differences between the two of them.*

- Personal introductions 11:00AM-12:00PM
  - *Teachers, participants, and other guests stand and briefly introduce themselves.*
- Lunch 12:00PM-1:30PM
- Introduction to ELDP projects 1:30PM-2:00PM
  - *How long will the projects last? What communities will the projects involve? What are the goals of the project?*
- Planning recordings and research 2:00PM-2:45PM
  - *Paschal talks about how it is important to develop research questions, and to highlight your personal interests.*
  - *Participants form small groups corresponding to their community and list what they see as of value in their community, and what knowledge has the potential to be lost. The follow-up question is asked: 'What knowledge should be shared, and what knowledge should not be shared?'*
  - *The final question in particular sparked a lively discussion about secret knowledge and secrets in general. It was widely agreed that, in most cases, secret knowledge could be clearly distinguished from personal secrets or gossip. It was also established that most secret knowledge was not secret in the sense that only certain people knew it. Indeed, most community members know the secrets of their community, but those who can openly talk about it are restricted. It was decided that, while research would be thorough, most secrets and secrets knowledge would be avoided.*
- Enlisting participants 2:45PM-3:30PM
  - *Christina talks about working with different kinds of people (gender, types of work, education) and different kinds of speakers (especially old versus young and speakers seen as 'pure' versus those often marginalized). She talks about the challenges that come with working with people you may not normally interact with in the community, but that all community members have a contribution to make to the documentation.*





*Christina addresses the group*

- *In their groups, participants prioritize different kinds of people and talk about the kinds of recordings they might make with them. They identify challenges of working with each kind of person, as well as ways to address these challenges.*
- **Research exercise 3:30PM-4:15PM**
  - *Groups are asked to come up with a question and then give an answer. They are then asked to develop another question based on that answer. (E.g. Q: What are some major foods for the Ihanzu? A: Sorghum, millet, pumpkins, etc. Q: Why are these the major foods? A: Because these are what our parents ate. Q: Why did your parents eat them? A: Because they grew well in the environment. Q: How are they grown? A: They are farmed in manners x, y, z... Q: Was there a time when they could not be farmed? What happened?; Did the Ihanzu people always farm?)*
  - *As a follow up, participants were asked to plan how they would go about answering one of their 'question strings'. This resulted in a lot of discussion, as well as helped participants think about what research is, as well as what their research could look like.*



*Nange and Angela take notes*

*“The fact that the trainees were members of the indigenous communities they were planning to work with made a big difference. This meant that we could assume the trainees were already aware of some speech genres or topics to document, and that they would be able to easily work with speakers in the community and communicate the significance of the project to them.”*

*-Organiser linguist, Dr. Richard Griscom*

*“I have learned a lot from the community [...]. Working with the community has many benefits.”*

*-Ihanzu trainee Samwel Isiah*

- Obtaining consent 4:15PM-5:00PM
  - *Andrew talks about why we need consent to work with speakers (legal, ethical reasons)*
  - *Festo discusses some of the major elements of consent (that consultants understand the work they are doing before they consent to it, that they know they can stop or ask to not be recorded at any time, etc.)*
  - *Participants are given a consent dialogue and are asked to, as pairs, read the consent dialogue to each other.*

- Work schedule and payment scheme 5:00PM-6:00PM
  - *Richard and Andrew discuss salary and hours per week for local researchers, as well as responsibilities. Salary will be sent following metadata being sent. Richard and Andrew, when in Tanzania, will regularly visit local researchers to give support and monitor progress.*
  
- Dinner 6:00PM-7:00PM

*"It is often easy to forget the special needs of working with people who do not normally have much money. For me, arriving in a new place is fairly straightforward, as if I am missing something like a toothbrush or water, I can just visit a shop and buy it. For many of our attendees, who were arriving in Haydom for the first time, and without any money at all, this was a major issue. At this point in the workshop, Richard and I were regularly being asked by both our teachers and trainees for small advances to their salaries to cover things like soap, toothbrushes, as well as goods that they wanted to buy for their loved ones (a very important thing to do if you're visiting a big town from a rural area). Where Richard and I had envisioned making these payments at the end of the workshop, it became clear that doing this would not be fair and, as such, we both ended up paying out small advances throughout the workshop, and having to keep track of an increasingly long (and complicated) list. In the future, I would simply pay attendees a portion of their salaries on a daily basis."*

-Organiser linguist, Dr. Andrew Harvey

- Post-meeting and debrief with teachers 7:00PM-8:00PM
  - *General discussion about how the day proceeded. Teachers noted that many of the topics were led by the linguists today, but that their share of the teaching would increase in the following days.*
  - *Individuals who may need more support were identified, and it was discussed how to make sure they were being taken care of.*

*"The workshop was very intense and tiring, especially in the beginning."*

-Dr. Maarten Mous

## Wednesday, January 15th: Workshop day 2

- Breakfast 8:00AM-9:30AM
  
- Equipment overview 9:30AM-10:00AM
  - *An example of all of the equipment to be used by teams of local researchers was shown to participants, and each component was named and very briefly explained. (Computer, computer case, charger, and ELAN software programme shown by Paschal; voice recorder, microphones, dead cats, and batteries shown*

*by Christina; video camera, camera bag, and battery shown by Festo; team smartphone, Open Data Kit software programme, and phone charger shown by Richard; stands shown by Stephano; backpack, and rain fly shown by Andrew)*

- Audiovisual recording 10:00AM-10:30AM
  - *Richard talks about what it means to make an audio recording, as well as the basic elements of a good recording (usability, quality, naturalness, signal-to-noise ratio, etc.)*
- Audio equipment 10:30AM-11:15AM
  - *Paschal introduces the audio recorders and gives an overview of the parts (buttons, screen, internal microphones, SD card slot, etc.)*
  - *Christina introduces the microphones (shotgun and stereo), their differences, and the situations for which each is best suited*
  - *Stephano introduces the mic stands, as well as how to properly set them up*
  - *Festo introduces the batteries and the memory cards*
  - *Richard talks about microphone distance, setting recording levels to avoid distortion, and sound-to-noise ratio. Richard also talks about possible sources of noise (e.g. chickens, flies, people)*



*Paschal shows the different parts of an audio recorder*





*Christina demonstrates how to connect microphone capsules to the Zoom H5*



*Richard demonstrates how to position a microphone*

- Video equipment 11:15AM-12:00PM
  - *Festo introduces the video recorders and gives an overview of the parts (buttons, screen, viewfinder, SD card slot, etc.)*
  - *Christina introduces the batteries and the memory cards*
  - *Paschal introduces the camera stands*
  - *Andrew talks about camera distance, position, and lighting*





*Festo discusses the different parts of a video camera*



*Participants practice framing the shot with the video camera*



*Andrew demonstrates how to adjust the rain flies for the backpacks*

*“At this point, I had been run down and really ill for two days (I found out after the workshop that I had typhoid fever). Looking back, and considering all the external challenges, there’s no way the workshop could have been held without support from the Gorwaa teachers, the invited Tanzanian academics, and my co-organiser Richard.”*

*-Organiser linguist, Dr. Andrew Harvey*

- Lunch 12:00PM-1:30PM
- Recordings: Activity A 1:30PM-2:30PM
  - *Pairs of participants, accompanied by a teacher, use their equipment to make an audiovisual recording. Participants spread out on the road and in the grounds surrounding the workshop venue, and take turns so each participant has the chance to use the equipment.*





*Festo helps Sara and Samwel preparing for a recording session*



*Angela and Nange create their first recordings*

- Metadata collection 2:30PM-4:00PM
  - *Festo introduces the concept of metadata: what it is and why it is important*
  - *Richard introduces the Open Data Kit software for metadata collection*
- Recordings: Activity A Feedback 4:00PM-4:30PM
  - *Andrew has taken the audio and video from each device used in the activity above and synchronizes it in ELAN. He presents a selection of these recordings to the group and gives feedback, focusing especially on common mistakes (use of the wrong microphone, video recording into the sun, etc.)*



*Richard shows how to use Open Data Kit on an Android smartphone*

- Writing Systems 4:30PM-6:00PM
  - *Andrew and Richard separate the participants, Andrew taking the Ihanzu participants, and Richard taking the Hadza participants. Each group is shown the main differences between the Swahili writing system, and the Ihanzu or Hadza working orthographies. Groups are asked to write specific words to work on elements such as vowel quality for Ihanzu, and clicks for Hadza.*
  - *For an activity, each group is given a small dictation, in which short recordings (single words or short phrases) are played and participants write what they hear in the working orthography. Feedback is given at each step.*



*"The section on orthography was really not sufficient and I felt unprepared to teach Woodburn's Hadza orthography."*

-Organiser linguist, Dr. Richard Griscom

- Dinner 6:00PM-7:00PM
- Post-meeting and debrief with teachers 7:00PM-8:00PM
  - *Much of the time was spent with teachers, familiarizing them with the Linux system on the new computers which participants would be given the following day. The Gorwaa teachers had previously run Windows systems on similar machines.*

## Thursday, January 16th: Workshop day 3

- Breakfast 8:00AM-9:30AM
  - *One of the participants was quite ill, and Andrew accompanied them to the nearby dispensary for some diagnostic tests.*
- Recordings: Activity B 9:30AM-12:00PM
  - *Pairs of participants, accompanied by a teacher, use their equipment to make an audiovisual recording, as well as use the Open Data Kit software on their team smartphones to record session metadata.*
  - *The recording task took much longer than originally scheduled (1 hour had been scheduled, but pairs continued until lunch).*

*"If we had not put an extra day in the schedule, designed for extra training or in case we fell behind, getting through all of our training goals would have been impossible."*

-Organiser linguist, Dr. Andrew Harvey

- Lunch 12:00PM-1:30PM

*"Most of the trainees had never used a computer before [...]. This meant that a lot of basic tech literacy topics had to be covered."*

-Organiser linguist, Dr. Richard Griscom

- Basic computer skills 1:30PM-6:00PM
  - *Paschal introduces the computer, and gives an overview of its parts (buttons, power, ELAN software, etc.)*
  - *Stephano teaches about computer safety (the delicate nature of the machine, the danger of theft, what a computer virus is, etc.)*

- *Richard introduces file naming and bundling conventions*
- *As an activity, pairs take the recordings they made that morning, load them onto their computers, and bundle them together with a unique identifying number)*



*Paschal introduces the computers to the group*

*"[I was] really caught off guard [...] [w]hen we realised that none of the [trainee] computers could run ELAN with video files and I needed to manually download and install additional packages to each computer."*

*-Organiser linguist, Dr. Richard Griscom*

- Dinner 6:00PM-7:00PM
- Post-meeting and debrief with teachers 7:00PM-8:00PM
  - *The morning recording activity, as well as the afternoon computer skills lesson took much more time than planned and, as a result, a considerable amount of rescheduling had to be done for the following day.*

## Friday, January 17th: Workshop day 4

- Breakfast 8:00AM-9:30AM
- Recordings: Activity C 9:30AM-11:30AM
  - *Pairs of participants, accompanied by a teacher, use their equipment to make an audiovisual recording, use the Open Data Kit software on their team smartphones to record session metadata, load the material onto their computers, and bundle the loaded material.*







- Group Photo 11:30AM-12:00PM



*Group photo of all workshop participants*

- Lunch 12:00PM-1:30PM
  
- ELAN 1:30PM-4:30PM
  - *Andrew introduces ELAN, and explains what it is used for (as a workspace where you bring together and work on audiovisual recordings from a session)*
  - *Paschal leads a lesson on how to synchronize audio and video files using ELAN (while other teachers provide small group support)*
  - *Stephano leads a lesson on how to translate and transcribe using ELAN (while other teachers provide small group support)*

*"Writing [in] ELAN, with the mp4 and wav together - this is completely new!"*

*-Hadza trainee (Domanga) Nange Chaka*

- Data Backup 4:30PM-5:30PM
  - *Festo explains the importance of backing data up*
  - *Christina leads a lesson on the workflow for project data*

<p><b>Before the Session</b></p>	<p>Plan the Session:  <i>-check the equipment (batteries, memory)</i>  <i>-compile the goals (e.g. what do you want to learn?)</i></p>
<p><b>During the Session</b></p>	<p>Conduct the Session:  <i>-obtain consent, if not already obtained</i>  <i>-record person metadata</i>  <i>-record session metadata</i>  <i>-engage with the speaker, ask questions, if appropriate, or think of follow-up questions for further recordings</i>  <i>-monitor the recording</i></p>
<p><b>After the Session</b></p>	<p>Bundle the Data:  <i>-transfer all audio/video from each session into a new folder (bundle)</i>  <i>-assign all bundles a unique identifying number</i>  Save Bundles to Hard Drive  Transcribe/Translate a Subset of the Data  <i>-choose a bundle you want to work on</i>  <i>-create an ELAN file for this session</i>  <i>-transcribe/translate this session</i>  Save Transcribed/Translated Bundle to Hard Drive</p>
<p><b>At Weekly Meeting with Regional Partner</b></p>	<p>Discuss your Recordings  <i>-what did you record?</i>  <i>-how was the process?</i>  <i>-what did you learn?</i>  <i>-how can you improve?</i>  Plan Future Recordings  <i>-what do we want to learn now?</i>  <i>-who should we work with?</i>  Back Up Bundles to Each Others' Hard Drives</p>

- Recordings: Activity C Feedback 5:30PM-6:00PM
  - *Andrew has bundled and synchronized the recordings made that morning, and gives feedback on the results, focusing on common errors.*



*“Being able to provide feedback on the recordings made that day was an essential way to help trainees learn. However, taking all the material, putting it in a viewable format, systematically taking notes on its quality, providing feedback, preparing feedback sessions, and communicating issues to the teachers, was really time-consuming. Richard or I should have really given more of our time to it.”*

-Organiser linguist, Dr. Andrew Harvey

- Dinner 6:00PM-7:00PM
- Post-meeting and debrief with teachers 7:00PM-8:00PM
  - *A football game was on TV, so most of the participants remained in the meeting room long after dinner to watch. Very little debriefing occurred.*

## Saturday, January 18th: Workshop day 5

- Breakfast 8:00AM-9:30AM
- Recordings: Activity D 9:30AM-12:00PM
  - *Pairs of participants, accompanied by a teacher, use their equipment to make an audiovisual recording, use the Open Data Kit software on their team smartphones to record session metadata, load the material onto their computers, bundle the loaded material, create an ELAN file with synchronized audio and video media, and back up the result.*
- Lunch 12:00PM-1:30PM
- Recordings: Activity C Feedback 1:30PM-2:30PM
  - *Feedback is given by teachers on the recordings made that morning*
- Questions and discussion 2:30PM-6:00PM
  - *-General discussion at the end of the workshop. Some major areas of discussion and review include:*
    - *Consent*
    - *“How do I best work with consultants?”*
    - *When is it appropriate for pairs of local researchers to work together on a single set of recordings?*
    - *Can I work with my family sometimes?*
- Dinner 6:00PM-
  - *-During dinner, every participant was given a certificate, a candid photo of themselves taken during the workshop, as well as a copy of the group photo.*

*Teams of local researchers were given their backpacks of equipment, and wished good luck as they began their first week of language documentation.*

*"It was a very intense week! Every day was chock full of non-stop activity from the moment I woke up until it was time to go to sleep."*

-Organiser linguist, Dr. Richard Griscom

## Reflections

As mentioned in the introduction, the goal of the workshop was to train native speakers of the Tanzanian languages Ihanzu and Hadza to independently conduct ethical audiovisual language documentation in their own communities, within the context of two language documentation projects. In terms of learning outcomes, this included:

- basics of data collection (identifying people to work with, preparing questions, obtaining consent)
- audiovisual equipment (using and caring for equipment, making good recordings)
- transcription and translation (using working orthographies, using the ELAN software)
- data management (recording metadata, understanding workflows, backing data up)

In terms of whether these learning outcomes were all met, it must be said that, once trainees returned to their communities, a great deal had to be refreshed and re-taught by both Richard and Andrew during subsequent visits. This was, however, largely expected: the workshop was barely 5 days long, and adapting what was learned to the context of each trainee's home community will always be a great challenge. When re-teaching and refreshing in the communities did take place, all of the trainees were now dealing with familiar concepts, and generally responded very quickly.

With this said, feedback consistently suggests that the workshop be roughly doubled in length, with one half dedicated specifically to the use of computers.

*"If the same kind of workshop were to be held again I would suggest that [trainees] get more time (two weeks or so) [especially] to learn about the basics of computer applications and data management."*

-Dr. Michael Karani

*"I thought the training in orthography was insufficient. This is crucial in my view to get better data and to achieve more linguistic reflection among the researchers. [...] Also] I cannot imagine the training on file management was sufficient.*

-Dr. Maarten Mous

*"Regarding the technology, I would like to learn a lot more."*

-Hadza trainee (Domanga) Nange Chaka

*"[If I were to do this again, I would schedule] one week of learning how to use a computer before the language research training itself. That is to say: one week for computer training, one week for language research training. This will help to establish a general understanding of computers, which will make learning ELAN to write and translate easier."*

-Teacher Stephano Edward

In addition to the explicit learning outcomes, other learning outcomes developed less through explicit teaching, but more through practicing, talking to each other, and learning from others' experiences. This included:

- seeing language and verbal arts as things that one can ask questions of
- understanding each member of a community as a potential teacher (rather than a small number of "experts" or "elders")
- conceiving oneself as a "researcher" - capable of creating meaning and searching for patterns - within their own community

These learnings seem very clearly to have had a more profound impact. Virtually all trainees reported feeling more confident, more capable, and as if they were truly "researchers". During none of the post-workshop visits did Richard or Andrew encounter trainees who were at a loss for recordings they wanted to make or research questions they wanted to ask.

*"What I learned during the workshop is [...] to see myself as a researcher - to approach my work more broadly. Before the workshop I was just collecting stories - now, I collect lots of different Iraqw cultural material."*

-Iraqw trainee Basilisa Hhao

A further element - integral to the training workshop, and worth reflecting on - was the leadership of the experienced Gorwaa local researchers. As the above day-by-day account shows, a large amount of the teaching and support was done by these local researchers, and the workshop would not have been possible without their knowledge and skills.

*"I personally enjoyed the lessons from Gorwaa local researchers. The local trainers provided first-hand experience and the training was made more practical and relevant in [the trainees] context.*

*The use of local [teachers] was generally efficient and it is something to be emulated [...]. On the part of the [teachers] [t]his creates the sense of ownership and responsibility and it helps them understand the importance of language projects done by researchers from abroad. It also ensures sustainability of the projects when foreign researchers have left the country."*

-Dr. Michael Karani

It should be emphasized here that the expertise brought by the Gorwaa local researchers was virtually entirely developed through practical experience: approximately 18 months prior to this workshop, Andrew provided some basic lessons in audiovisual documentation technology and use of computers (spread over a series of weekly meetings over around 2 months). Following this, the researchers applied these new skills in making a large and diverse set of recordings of the Gorwaa language. During the ensuing 12 month project, they each developed different areas of interest, research inquiry, and styles of working. Because the linguist was not in Tanzania at the time, their praxis had the opportunity to develop in response to the needs and realities of the local Gorwaa community. As such, the employment of the Gorwaa local researchers as teachers was in hope that their techniques - developed in a marginalized Tanzanian community, by members of that community themselves - could be readily adapted and used by other groups whose situations were not so different.

*"[...] from my perspective as one of the teachers that participated in [the workshop], one of the things that seemed difficult was the prospect of teaching a person who had never before held a computer to use ELAN, to write words, to listen to audio and to examine video, and, on top of that, to translate it into Swahili. But after this experience, I learned that, to take heart and believe in the ability of a person to understand something and then do it, is really the secret of success in everything. So, even though while I was teaching I had fears about whether they would understand, through the learning and cooperation that was going on during the lessons, we arrived at the understandings we had planned."*

-Teacher Stephano Edward

With that said, there could have been more support for the Gorwaa local researchers as they took on their new role as teachers. As it were, the four local researchers had two days of planning with the linguists - one of which was the day before the beginning of the workshop, and thus regularly interrupted by having to run back and forth to the Haydom bus stand to pick up participants as they arrived. In order to allow for the local researchers to make the most of the items they had been assigned to teach, the linguists could have provided further time and support as the Gorwaa researchers reflected on their learnings, identified important topics and themes, and prepared to transform these into teachable items.

*“Every teacher should prepare themselves for the material they will be teaching, and pass this material by each of the other teachers, such that when they present they will not trip up [...]. Though it is important that the class be open [such that others] may contribute ideas and further clarification. Personally, I felt that I didn’t provide enough detail. Next time, I will try to prepare and have more detail such that the experience is better. Furthermore, I will try harder to provide special support to ensure that the participants come out with a better understanding.”*

-Teacher Stephano Edward

Ensuring that the majority of the teaching came from a local orientation (i.e. the Gorwaa local researchers) and not from an outside one (i.e the foreign linguists, or even local university-trained linguists) was one of the most exciting elements of the workshop, and was key to the effective development of the trainees.

*“To make the Gorwaa team teachers was brilliant and crucial.”*

-Dr. Maarten Mous

## Recommendations

Using the experience of hosting this workshop as a foundation, we have developed some generalized recommendations for those who plan to host a workshop in a low-resource environment.

### Infrastructure and facility requirements

All facilities and services need to be reserved well in advance, including the workshop facility, lodging facilities, and food. The workshop facility should have a quiet meeting space that matches the number of expected participants. A space that is too small will make participants feel crowded, and a space that is too big will make it hard to communicate or conduct group activities. Make sure to check if noise may be an issue, and consider visiting the facility multiple times to get a more complete picture of environmental noise. Lodging facilities should also be located in quiet areas so that participants can easily rest during the night.

It is advantageous to arrange for a facility that is either close to or the same as the areas where participants will be eating food and sleeping. This makes it easier to transition between periods of instruction, meal times, and breaks.

It will most likely be necessary to use a space that has at least intermittent electricity, because language documentation involves the use of electronics which need to be charged. If you are not familiar with the electricity of the area you are working in, then ask around beforehand.

Depending on the methods or technologies you are using, you may require mobile internet, as well.

Food should be arranged according to local standards and the preferences of trainees. Catering is recommended because it keeps workshop participants together during the day and makes transitions easier. Make sure to agree on the specific foods that will be provided and leave some room for flexibility.

## Participants

The number of participants should be limited to no more than 25-30 in order to avoid the need for a microphone and speakers during instruction. With this size, instructors can easily address the entire group and manage small group activities.

If possible, participants with similar levels of experience in the subject matter should be invited to participate in the training. Different experience levels can make instruction more difficult to manage as some participants will learn faster than others and become bored or frustrated, while others will be left behind as the group continues. It is also best to invite participants who intend to put the knowledge they gain during the workshop into practice soon after the workshop takes place, because this gives them an increased incentive to focus during the training.

Participants need to be informed of the workshop dates well in advance, and they may need assistance to travel to the workshop location. It may be helpful to arrange for participants from nearby areas to travel together.

## Instructional design

Whenever possible, try to combine lecture-style learning, group discussion, and hands-on learning opportunities. It is possible that some participants are not accustomed to lecture-style learning and may lose interest or focus if not provided with opportunities to implement their new knowledge or engage in dialogue about it. Small-group hands-on activities are especially important for participants who don't have experience with some of the technologies. Groups can be formed based on experience levels, project teams, or community membership.

*"If we had to do it again [...] I would suggest [planning] enough time for practical exercises, rather than sitting together for long periods of time."*

-Ihanzu trainee Samwel Isiah

Schedule ample time for the review of new material, and build flexibility into the schedule so that more time can be spent on topics that need to be reviewed. You may want to consider scheduling one or more "flex days" with no predefined content in the middle or at the end of the workshop, so that additional training or review can be provided, either for the entire group or a



subset of the participants. Also, put a structure in place for follow-up learning after the workshop, either remotely or in person, so that participants have a way of addressing any knowledge gaps.

*“It would be good to have a centre where we can meet and talk about the challenges of [our] work and to discuss together face-to-face.”*

-Iraqw trainee Basilisa Hhao

## Instructors

Whenever possible, instructors should be members of local indigenous communities who share a common contact language with participants and have experience in conducting language documentation. These instructors are best able to understand the needs of trainees and to provide workshop content in a way that is accessible to trainees. If members of indigenous communities with experience in conducting language documentation are not available, inviting members of indigenous communities who have contributed to language documentation by speaking or performing could also be helpful.

*“The Gorwaa [teachers] made a big difference [...]: they grew up in indigenous communities in the same country as the trainees and thus share a lot in common with the trainees in terms of their cultural background. [They] speak Swahili fluently and are able to easily communicate with the trainees. Also, by teaching the material, the Gorwaa [teachers] were effectively demonstrating that trainees could succeed.”*

-Organiser linguist, Dr. Richard Griscom

Instructors and workshop hosts should meet together to design the content and format of the workshop, and clear expectations should be established as to who is teaching what.

## Acknowledgements

Special thanks are due to Dr. Maarten Mous, Dr. Michael Karani, and Augustino Amos Kagwema for attending the workshop, actively contributing to every conversation and every activity, and helping us reflect on ways we can improve this kind of learning event in the future. Thanks to Nadia Jassim for taking the photos that capture the inspiring moments of learning and doing. Thanks to the Gorwaa teachers who were the cornerstone of the workshop in so many ways. And, of course, thanks to all of our trainees, who threw themselves into the project as active learners, and continue to do so every day of their research.