Co-creating Collages to Visualize Interpretations about Language Access in North Central Florida

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Abstract: This case study presents how collages can be used as a participatory tool and a design outcome when working with multilingual and multicultural community members, technical communicators, and designers. In conversation with multilingual community members of North Central Florida, a series of collages was designed to visually represent the experiences and obstacles multilingual community members faced concerning language access and language justice. Discussing the collages with the participants facilitated meaning-making processes to explore and visualize stories at the intersections between language, migration, personal experiences, and cultural backgrounds.

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Introduction

In this case study, I present examples of how collages can be used both as a process and an outcome of participatory design projects when working with multilingual communities, technical communicators, and designers. I used collages to explore and visualize people's stories around their heritage languages to raise awareness about the underrepresented linguistic diversity in North Central Florida. By engaging in conversation with participants to decide which images related to their stories, memories, and cultures they wanted to include in the collages, I learned how multilingual community members can work in collaboration with designers to make central decisions about how their experiences are visualized.

Subsequently, I transformed the images suggested by the community members into collages. When sharing the collages with the participants, new meanings emerged in conversation with them. As I approach design as a social process, instead of as an individual act of creation, the negotiation and exploration of meanings play a central role. These negotiations "routinely involve translations from the verbal to the visual and back again" (Tomes et al., 1998, p. 128), and allow an idea to progressively evolve and become a final design. Likewise, asking participants about images for their collages not only led them to share personal and cultural stories. Once a first draft of a collage was finished and used to start a new conversation with participants, it facilitated a process of translating the recently created visuals into alternative or new stories.

Collages have an ambiguous nature and can carry multiple meanings (Gonzalez, 2020). There is no single right or wrong way of interpreting them. Thus, the verbalization of new possible interpretations opened the possibilities to further explore the complexities of participants' cultural and personal experiences. Some of these emerging reflections touch on issues of social justice, as they address how not providing language access limits migrant populations' opportunities and emotional and social well-being.

Participatory Design Beyond Usability

Technical communication researchers such as Agobka (2013) advocate for a participatory approach to localization where communities are able to actively participate in design and research processes. Evia and Patriarca (2012) explore the benefits of involving users' creative input when working on cross-cultural communication projects that involve different languages, dialects, and cultures. Finally, Verzella (2017) stresses the importance of implementing iterative cycles of meaning negotiations and the collection of users' feedback.

In this sense, co-design and participatory design approaches intersect with technical communication. Co-design refers to a "creative cooperation during the design process" (Steen et a., 2011, p. 53) where people with different backgrounds "share and combine ideas and knowledge" (Steen, 2013, p. 16). Moreover, co-design processes facilitate the development of products and services that better match peoples' needs (Steen et al., 2011). Similarly, in participatory design approaches, users have the power to make important decisions (Scariot et al., 2012). Thus, "the roles of the designer and the researcher blur, and the user becomes a critical component of the process" (Sanders, 2002, p. 2).

Because of their intrinsically social nature, co-design and participatory design processes have the potential to address social issues, as they "foster cooperation and trust between different groups, meaningfully engage the hard to reach, and achieve support for change" (Blomkamp, 2018, p. 1). On the relational side, trust and horizontal cooperation with marginalized communities during the design process are critical elements to address social justice and equality. Beyond the process, the areas of intervention of design can overlap with social justice as well. For instance, Jones (2016) argues that the relationship between design and social justice is rooted in design's capability to shape how people experience the world through interactions with other individuals, communities, and the environment.

Most of the previously referenced authors, both from technical communication and design, employ the term *user* to refer to a group of people involved in design processes (see Evia & Patriarca, 2012; Agboka, 2013; Verzella, 2017; Steen et al., 2011; Steen, 2013; Scariot et al., 2012; Sanders, 2002; & Jones, 2016). However, *user* might not be an encompassing concept in social justice projects that aim to explore and change multiple ways in which people experience the world. In the context of the recent history of design, the term *user* "emerged during the heyday of usability research, whose concern was rather rational and pragmatic —whether users can easily and efficiently operate an interactive product to complete an intended task" (Xue & Desmet, 2019, p. 40). In contrast, "social justice attends how individuals experience oppression," considering the ways in which burdens, power, and privilege "have been equitably (or not equitably) distributed within society and how to make a given context more equitable" (Fox et. al., 2016, p. 3293). Social justice addresses social, emotional, and political complex dimensions of human experiences that cannot be oversimplified as a matter of usability and efficiency.

After user-centered design, other approaches such as Human-centered and Humanity-centered design have emerged. These concepts have a more holistic approach that sees the people we are designing with as human beings beyond the rational and pragmatic layer. As Kessler et al. (2021) assert, participants are not just users but people with embodied experiences, thoughts, and attitudes that meaningfully influence how they interact with the world. For this case study, I will use the term multilingual community members to refer to the people who speak different types of English, with different proficiency levels, who have culturally rich native languages, and who have shared their stories for the project that I present in this article.

More than being a matter of wording, shifting from the term user has two main implications for the project presented in this case study. On one hand, recognizing the humanity in the people we are designing with requires an exploration of people's "feelings, meaning perceptions and emotional reactions" (Xue & Desmet, 2019, p. 38), instead of focusing only on presumably objective responses. On the other hand, what is fundamental to redesign is not how people use things, but aspects of the social, political, and economic structures that are designed to unequally distribute power and burden. I approach design as the design of situations where people from different backgrounds can converge, bring their own perspectives, and create things together. Usability and efficiency are no longer central. Instead, it is fundamental to create platforms to elicit conversations where a variety of meanings, from people with diverse worldviews, are explored, negotiated, and materialized (Dubberly & Pangaro, 2019). The goal of exploring a variety of meanings is not necessarily reaching an agreement on a single way of creating

interpretations, but acknowledging that people who come from different backgrounds can contribute with different ways of meaning-making. Highlighting and communicating the plurality of perspectives regarding a social issue can be an initial step to making the problem visible, creating awareness, and triggering change. This is of particular importance when working on social justice initiatives with vulnerable communities whose perspectives and knowledges have been usually marginalized. An example of these communities is migrant populations in the U.S., where the visualization of their data and experiences has been historically intertwined with marginalization and imbalances of power (Li, 2020).

Collages

My design approach takes elements from co-design and participatory design by blurring the hierarchy between people involved in the process. Multilingual community members, technical communicators, and designers have the innate ability to bring their valuable interpretations to shape the process and make important decisions for the design outcome. These interpretations are brought about through the co-creation of collages, a tool that can facilitate the exploration of tacit knowledge. Moreover, collages can facilitate the recognition that lived realities have multiple dimensions and sometimes cannot be oversimplified through a single way of meaning-making.

Collages are a visual, representational, and expressive technique where different images are removed from their original referential context and combined to create new pictures. While the fragments of images have existing meanings, slicing a variety of pieces, combining, and suturing them allows to intentionally play with the traces of former meanings and carve out new ones (Farago, 2021). The possibility of juxtaposing different images and shifting their meanings gives collages an ambiguous quality where people can have different interpretations of what they see (Gonzalez, 2020). Moreover, as collages are a way of articulating images in a non-linear way, the process of creating them "breaks away from the linearity of written thoughts" (Butler-Kisber & Poldma, 2010, p. 3) and facilitates the expression of feelings. Thus, the collages "carry much information that may not be directly apparent" (Stappers & Sanders, 2003, p. 85) and can be used to visualize stories and start conversations where a variety of meanings and interpretations are explored.

In the history of modern art, the word *collage*, from the French "*coller*," to paste, has its origins in the work of cubist artists such as Pablo Picasso, Georges Braque, and Juan Gris (Farago, 2021). However, it is important to mention that even before the formal acquisition of the term collage, other groups of people had already been applying this technique. For example, in the 19th century, upper-class Victorian women used collages as a pastime, where they created elaborated scenes that "threw the meaning of photography and their own societal roles into question" (the J. Paul Getty Museum, 2021); and in the 1500s, some anatomical prints included paper flaps that allowed to juxtapose layers of images of the internal and external organs of the body, resulting in images with collage components (Elliott et al., 2019).

The creation of collages is linked to the availability of images as the main material. Nowadays, with mass-produced and digital images, collage has become a generally accessible technique that is used in a variety of diverse contexts, including kindergarten activities (Hamilton, 2002),

therapy in patients with dementia (Stallings, 2010), and as a tool for political expression (Särmä, 2015). In the design discipline, collages can be used as a research tool. For example, the design consultancy IDEO, in their Design Kit, states that "having the people you're designing for make and explain a collage can help you understand their values and thought processes" (IDEO.ORG, n.d.). In this case, the collage becomes a visual record of research. Similarly, in their Design Method Toolkit, the Digital Society School proposes that group sessions where participants create collages about a theme can help uncover the emotional aspects of their experiences. Finally, the design consultancy Frog, in their Creative Action Toolkit, mentions collages as a tool for researchers to visualize their findings after conducting interviews with the participants of a project.

The possibility of articulating images to create scenes that combine a visible reality with imagined and subjective experiences, makes of collages a tool that can facilitate access to tacit dimensions of knowledge (Butler-Kisber & Poldma, 2010). In participatory design, according to Evia & Patriarca (2012), exploring tacit knowledge is central to understanding people's experiences, but doing it is a process that is "seldom documented or standardized" (p. 351). The toolkits mentioned in the previous paragraph present collages as a tool to elicit meaning; however, these are not necessarily created with a participatory design approach. In the toolkits by IDEO and the Digital Society School, the instructions specify that researchers/designers should provide the images that are part of the collage supplies. Even when participants can decide which images to include in their collages, the range of possible images available is determined by the designers facilitating the sessions. In the case of Frog's toolkit, collages are a tool used by designers to visualize their takeaways from the interviews with participants without necessarily including their direct feedback on the visual decisions that shape the collages.

Collages and translation intersect in the field of visualization. The possibility of conveying multiple meanings makes of collages a tool that can be helpful in translation processes to adapt and represent information across cultures. Visualization in technical communication and translation can be especially relevant in intercultural communication processes, representation and adaptation of information across languages, and data representation (Turner & Gonzales, 2020). Sanchez (2017) recognizes that visual artifacts created in these contexts might require visual literacy. However, in the project presented in this case study, the visual literacy needed to make interpretations out of the collages does not come from formal education in technical communication, design, or semiotics. Instead, it comes from participants' lived experiences verbalized through their personal and cultural stories.

When using visualizations to overcome language barriers, it is often disregarded that visuals are not "objective, or universally understood" (Bloom-Pojar & DeVasto, 2019, p. 2). This might be a disadvantage when conveying literal and objective information. Nevertheless, when exploring tacit knowledge, this opens the possibility to explore a variety of meanings that are relevant for participants. Depending on people's cultural and personal experiences, we might bring different meanings that are valid. As a result, multiple interpretations can co-exist in a single collage. Thus, collages facilitate people's access to information and contribute to the creation of new visuals. This is critical in co-design and participatory processes that aim to make legitimate cultural voices that have been marginalized (Dutta & Das, 2016) and when working with minorities that otherwise might be overpowered (Moore & Elliott, 2016).

Multiculturalism and Language Justice in North Central Florida

The project presented in this case study took place in North Central Florida, in the U.S. In recent years, migrant populations have been increasing in this part of the state (New American Economy, 2021). However, the presence of multilingual communities and their languages has not been extensively documented and, as a result, might seem not so visible when compared with other cities in Florida such as Miami and Orlando (Gonzales et al., 2021).

The mistaken idea that the region is not as linguistically diverse contributes to the lack of language access services (Gonzales et al., 2022) and the implementation of language justice. Language justice emphasizes the importance of not only facilitating multilingual communities' access to information in the language of their preference in federally-funded programs—as protected under the 1964 Civil Rights Act—but also that they can effectively participate and feel included in communication processes in their communities (author, 2022). Additionally, The Supreme Court treats "discrimination based on language as equivalent to national origin discrimination" (Chen et al., 2007, p. 362). Discrimination based on language is a critical social justice issue when, for example, marginalized communities such as undocumented migrants cannot access their political, social, or health rights due to not proficiently speaking the dominant language of a given place.

Since language is an inherent component of culture, language justice is intrinsically related to multiculturalism. Multiculturalism celebrates the diversity of individuals and groups in a society, facilitating the expression of their uniqueness and particular identities, the commemoration of their heritage, the display of their culture in public spaces, and the possibility to engage in equalitarian conversations with others (Yahya, 2021). Multiculturalism and linguistic diversity also imply different forms of meaning-making and interpretation, and with that, semiotic diversity (Iedema, 2003). In multicultural contexts, it is necessary to recognize that written and verbal language does not always play the same level of importance in different cultures. For example, Q'eqchi, one of the Mayan languages of Guatemala, is used almost exclusively in its oral form instead of its written one (Brennen et al., 2007); and in some parts of Peru and Bolivia, the act of weaving the textile iconography of Aguayos —a traditional garment —is seen as an extension of language (Valdez, 2021).

Methodology

Intending to make visible the language diversity in North Central Florida, rhetoric professor Laura Gonzales and I, a design graduate student, started working together in the fall of 2021. I am Colombian and I live in the U.S. while I attend graduate school. My first language is Spanish and my second is English. To some extent, I relate to some of the difficulties that multilingual community members shared with us for this project. Communicating in my second language can be challenging since my fluency and vocabulary are limited compared to when I speak in Spanish. However, I recognize that I have never faced discrimination or challenges to access healthcare or other basic services because of lack of language access, as was the case of some of the participants in this project.

We had the support of The Rural Women's Health Project (RWHP), a Non-Governmental Organization (NGO) that works with migrants in North Central Florida. The RWHP put us in contact with community members who wanted to collaborate with us. When I joined the project, Laura had already conducted more than 40 interviews via Zoom with multilingual community members to become familiarized with their experiences regarding language access. I listened to the interview recordings and suggested that while it was important to communicate stories of injustices, alongside we could include stories of joy as well that people associated with their native languages. The intention was to avoid reinforcing participants' vulnerability through design by focusing only on discussing and sharing negative experiences. There is nothing wrong with languages per se; what creates negative experiences for people is the lack of language access and language justice. We decided to conduct subsequent interviews to explore, apart from the challenges and injustices, why heritage languages were meaningful for the participants.

Via Zoom and in person, Laura and I conducted approximately 20 more interviews focused on discussing stories of challenges, discrimination, and injustices, as well as stories of joy related to their languages. In the interviews, we also discussed with participants what images hold cultural or personal meanings for them and what they wanted to include in their collages. Subsequently, I assembled digital collages with these images to visualize their stories. Each collage is composed of fragments of different images. However, all of them have birds as a symbol of migration, as the act of migrating was a commonality among different participants' stories. The decision of using birds was also influenced by the idea of representing migration as a natural act beyond borders and immigration policies determined by human beings. Moreover, during the project, it became evident that some specific birds held personal significance for participants, as they recalled birds associated with various aspects of their lives, including those that were national symbols in their home countries, common in their hometowns, kept as pets, or featured in children's stories. Additionally, images of flowers, nature, and landmarks were also included to represent the participants' home countries as well as their current environment in North Central Florida. Once we had the first version of a collage, we shared it in a subsequent meeting with the multilingual community member whose story was being visualized to get their feedback and explore their interpretations. Afterward, we incorporated their feedback into a new version of the collage.

We created a set of 10 collages based on interviews with people from Haiti, Bolivia, Guatemala, Saudi Arabia, India, Vietnam, Kazakhstan, Bangladesh, Ghana, and China. The stories in the collages encompass a total of 15 languages: Haitian Creole and French, Aymara and Spanish, Q'anjob'al, Arabic, Hindi, Punjabi and Odia, Vietnamese, Kazakh and Russian, Bengali, Akan Twi and Chinese Mandarin. Aymara and Q'anjob'al are Indigenous languages from Bolivia and Guatemala, respectively. While participants might have different immigration statuses, this was not asked during the interviews and no identifiable personal information is disclosed in the outcomes of the project.

With the collages, we designed a series of multilingual postcards. On one side of each postcard, there is the collage and a participant's story written in one of their native languages (Figure 1). On the other side, there is the explanation of the main images and the story written in English (Figure 2). To raise awareness of language diversity, the collages that have been designed to date have been shared in public events in the city of Gainesville through postcards and a website, and

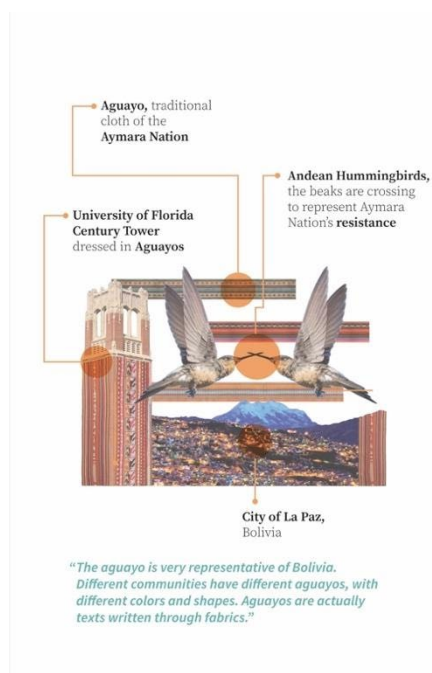will be displayed in an upcoming exhibit in the Matheson History Museum in the city of Gainesville, Florida.

Figure 1. Front of the postcard with the collage about Aymara and Spanish. As decided by the participant, part of the story is written in Spanish and part of it is written in Aymara.

Figure 2. Back of the postcard with the explanation of the collage about Aymara and Spanish. On the right side, the story is translated into English.

For this project, we used a Participatory Design approach. According to Kensing and Blomberg (1998), "three main issues have dominated the discourse in the Participatory Design literature: (1) the politics of design, (2) the nature of participation, and (3) the methods, tools and techniques for carrying out design projects" (p. 168). The politics of design address the distribution of power. While the interviews conducted included multilingual community members as well as individuals from organizations working with migrants, for this project, we decided to focus only on the stories told by the former about their own experiences. Including stories of language injustice told by others who saw multilingual community members in situations of distress, without including the voice of the person living the experience themselves would have contributed to silencing their voices. This, in turn, would have reinforced the position of vulnerability that people already face when not being able to communicate due to language barriers.

Collecting and sharing stories of injustices to visualize language diversity and issues of language access was one of the project's initial purposes. Throughout the process, we decided to explore stories of joy that people associated with their native languages and that they wanted to share as well. Once again, avoiding reinforcing participants' vulnerability through design, we included in the conversation the positive personal and cultural values that people see embodied in their native languages. All the narratives that are part of the final project include both stories of joy and stories of injustices and obstacles. In this way, we aim to show the meaningfulness that languages other than English have for their speakers but at the same time communicate the negative impact and urgency of language justice issues.

Regarding the nature of participation, Kensing and Blomberg (1998, p. 168) mention as key elements participants' possibility to participate in decision making and taking independent positions. These two aspects were facilitated using collages. On one hand, multilingual community members decided on the main images they wanted to visualize their stories. During the interviews, we asked them, for example, about birds that reminded them of their home countries or the experiences they lived there. Asking participants about the images they wanted in their collages allowed them to actively participate in the visual outcome without requiring any specific graphic design language or skills. On the other hand, collages have an ambiguous quality that allows for different interpretations depending on the way people make sense of the images. Therefore, there were no fixed or imposed meanings. When multilingual community members were reading the collages about their own or others' stories, they could come up with their own, independent interpretations.

As a tool, the collages played a main role in the methodology. When co-created as part of a design process, collages can be categorized into what Sanders (2002) calls a Make Tool. Make Tools are primary visual design research tools that work as a common ground to explore the perspectives of people with different backgrounds and life experiences. The Make Tools are "a design language built upon an aesthetics of experience rather than an aesthetics of form" (Sanders, 2002, p. 4). Rather than focusing on traditional design criteria such as color, layout, or hierarchy, when creating the collages for this project, we gave priority to the exploration of

specific images that had a cultural or personal resonance for the multilingual community members; and the articulation of these images in a composition that gave room to express the complexity of people's experiences. Thus, the collaborative creation of collages worked as a form of translation as it involved negotiating and representing meanings in an explorative and receptive way among individuals with different cultural and personal backgrounds.

From Images to Cultural and Personal Narratives

During the interviews, we explained the use of birds as a metaphor for migration and asked participants what birds they wanted to include in the visual translations of their stories. In some cases, it was the national bird of their home country, such as the Quetzal in Guatemala for the Q'anjob'al speaker. In others, it was a bird that they associated with their childhood experiences in their family's home, such as the hummingbird for Juana,[1] who grew up in Bolivia listening to Aymara and speaking Spanish. Only one of the participants, who is from Vietnam, said that no birds came to their mind in the interview. In response, Laura and I searched on Google images "Vietnam birds" and they immediately recognized one of the first results. It was the Indochinese green magpie. When they saw the bird, they told us about how their family used to have these birds as pets and taught them to repeat words before migrating to the U.S. This exemplifies how transforming the stories into collages can be considered an act of translation. Participants' cultural knowledge was central to exploring meanings during the interviews and transforming information, in this case, with the assistance of digital tools.

Figure 3. The collage about Vietnam includes a family of Indochinese green magpies, a lotus flower, the Golden Bridge in Vietnam, and different kinds of Vietnamese food.

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[1] All the names of the participants were changed to protect their privacy.

More than just mentioning the birds, participants explained why those birds were relevant to them or their culture. For example, Sita, who was born in India and whose maternal languages are Hindi, Odia, and Punjabi, wanted a peacock to be the bird in her collage (Figure 4). Peacocks are India's national bird. However, this was not the reason why she mentioned them. Sita wanted to include peacocks because they were meaningful for her in the context of her personal experiences and her language. This is an excerpt from her story:

> *There is no time in my life I've seen a peacock and not felt at home, my grandfather's home, at his farm in Punjab with the language that I love and can't write a whole paragraph in. It's mile after mile of these beautiful yellow flowers blooming [mustard green flowers], peacocks dancing and Punjabi being spoken and sung.*

Figure 4. The collage about Sita's story includes peacocks and mustard green flowers growing in the middle of a road in Florida. It also includes images if the Golden Temple in Punjab, India.

As we facilitated the participants translating their stories into collages, they recalled family memories, cultural images, and lived experiences. As they did so, they were expressing cultural knowledge that was particularly meaningful to them and that was central not only to translating the stories into visual collages but also to help us understand the relevance of heritage languages in their lives.

On the other hand, Esther, who is from Haiti and speaks Haitian Creole, French, and English, shared about the cultural importance of the village weaver, also called Madan Sara in Haiti. The Madan Sara is used in Haiti to represent the importance of Black women in the economy, for example, as vendors in agricultural markets.

Figure 5. The collage about Haitian Creole with the Madan Sara and a Haitian Black woman as the main two images.

The accompanying story in Esther's collage talks about assumptions made about Black people that limit their rights to language access in the U.S. This is an excerpt from that story:

> *There is a racist belief circulating in the U.S. that the Black population is composed only of African Americans. This has, in turn, created an assumption that Black people speak only English, so they don't need access to language access services.*

Esther brought her cultural knowledge and personal experience to the table, providing important context and nuances for the visual translation of her story. Using the collages as a tool, we facilitated a space to discuss the meaning of the Madan Sara and assumptions made about Black people in the U.S., highlighting the importance of cultural sensitivity and awareness in translation.

Asking multilingual community members about other images of nature and landmarks for their collages also led them, to different extents, to share the reasons why those were important to them. Discussing those images and the ones about birds, facilitated the exploration of stories that could potentially add layers of meaning when assembling the collage as a collaborative act of translation. In the case of Sita's collage, the meaning of the birds was aligned to the accompanying written story. The peacocks and the mustard green flowers helped to visualize her youth memories in the context of the personal and family stories of joy she associated with one of her maternal languages.

In contrast, in the case of the Madan Sara and Haitian Creole, the bird, in a symbolic way, proposes an underlying narrative alternative to what was being said in the written story. In the written story, Esther describes the challenges faced by Black communities who do not have English as their first language and their unacknowledged needs in terms of language access. It is

a story of injustice and vulnerability. On the other hand, with the image of the Madan Sara, this participant added a new layer of meaning that connotes the power of Black women. The focus on Black women is also reinforced with the woman included as one of the main images in the collage. In this story, vulnerability and power co-exist in the visual representation of the participant's experiences with language. It was the discussion of images with participants that facilitated the exploration of deeper or alternative stories complementary to the ones that they had previously verbalized, allowing us to engage in a collaborative and iterative process of translation.

From Collages to Co-Existing Interpretations

While asking about images for the collages led us to discuss previously untold stories, discussing the collages led us to explore different interpretations that people could make of a single collage.

The following is the story about Imani's experiences with Arabic. Imani is a multilingual community member from Saudi Arabia:

> *The Arabic language is linked to our identity and to our religion. We are Muslim and it's a privilege to speak Arabic because you can read the holy book in the native language in which it was written. You understand it better than those who read the translation because you cannot translate everything.*
>
> *We consider it a privilege, so it's very emotionally harmful to be in a place where your language becomes your obstacle. You feel vulnerable, tied up. You feel that you don't belong here, and you cannot live here.*

By the time of the first interview with Imani, I had not joined the project yet, so the use of collages and asking participants about images was not part of the interview. It was when I listened to the recording of Imani's interview and the significance she attributed to Arabic that I suggested that alongside the stories of injustices, we could also share the stories of why languages are meaningful to people. I created some options for the collage about Imani's story (Figure 6). Without her initial input about which images to use, I selected images that, according to what I found online, might hold significance for Muslims or people from Saudi Arabia. We used these first collages to start a conversation with Imani in a second interview to gather her feedback and decide on which images to use.
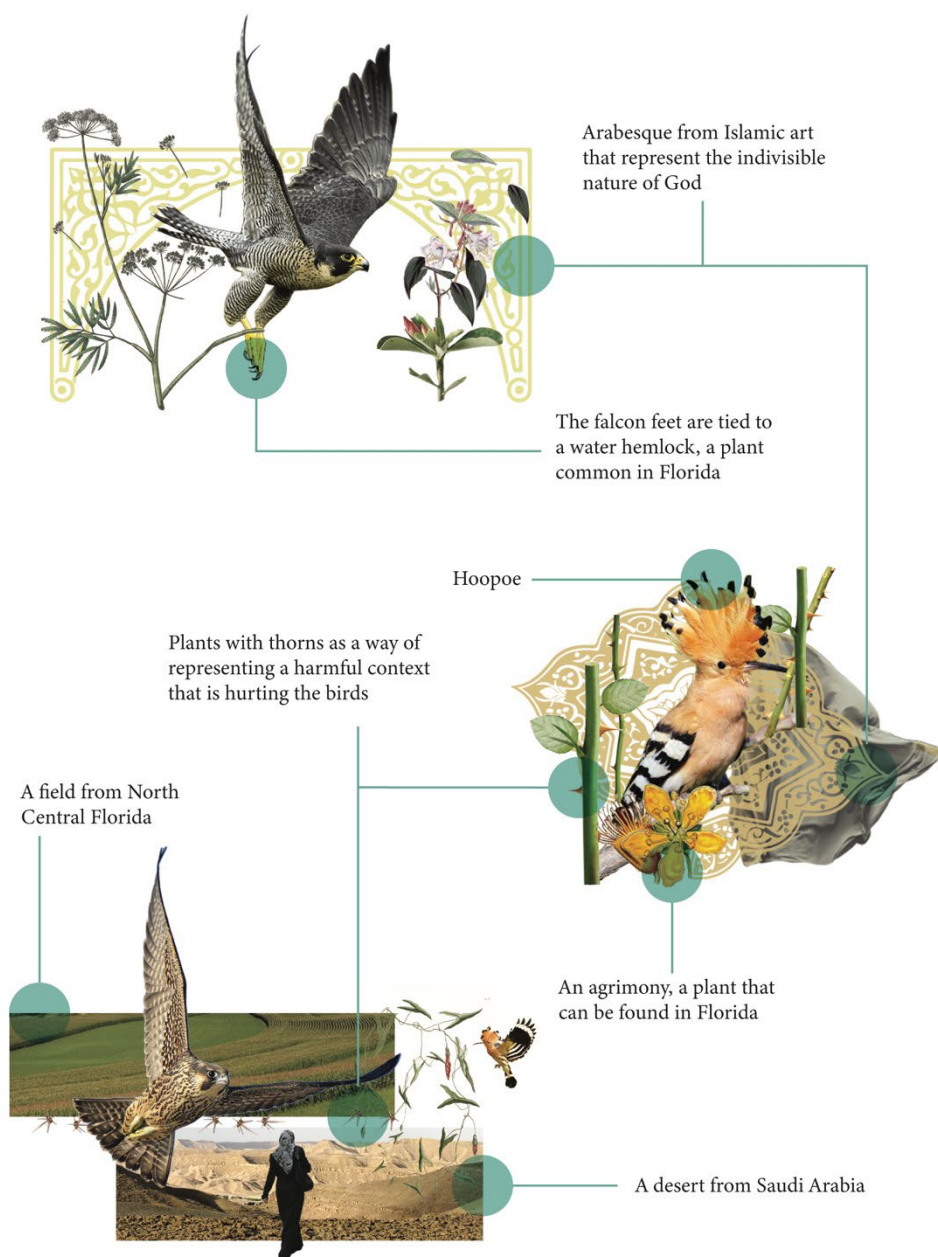
Figure 6. First iterations of Imani's collage about Arabic.

I presented her with two options for the birds. One of them was a falcon, which is the national bird of Saudi Arabia, and the other was a hoopoe, the messenger of Prophet Solomon in the Quran. As part of the story, the birds were articulated with other images to represent the idea of being hurt and facing a state of vulnerability, as is mentioned in the second paragraph of the participant's quote. Although Imani was familiar with the religious meaning of the hoopoe, she preferred to use the falcon, as she wanted the story to appeal to a wider population of Arab speakers who might not share her religion.

Imani selected the collage in figure 7. In that one, I portrayed the falcon losing its feathers to represent the state of vulnerability. When sharing the collage with Imani for feedback, she elaborated on the cultural importance of the falcon and described how she read the collage. She mentioned that the falcon is a bird that wealthy people have in Saudi Arabia. It is associated with power. Thus, she found it very expressive to see a cultural symbol of privilege losing its power. Finally, when sharing the collages in a public event in the Harn Museum in Gainesville, another multilingual community member, who was born in Bangladesh and whose maternal language is Bengali, mentioned that she read the falling feathers in Imani's collage as shedding parts of our own culture as we migrate and adapt to a new one. This is an example of how the visual language of the collages can help people connect to each other and each other's stories.
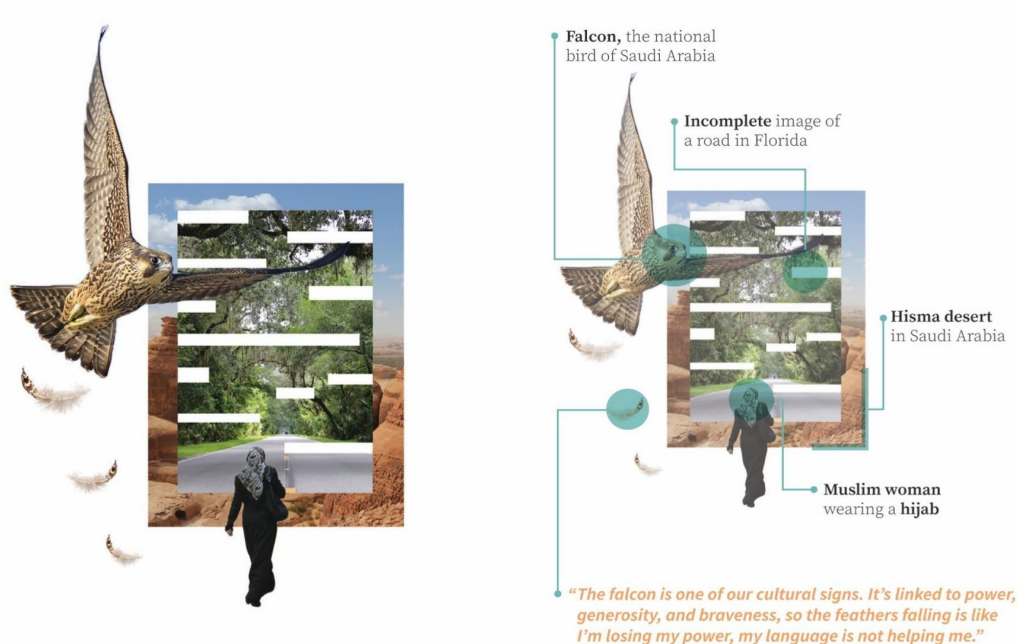

Figure 7. Imani's collage about Arabic and explanation of the main images.

In this case, the collage provoked three different interpretations. I, the designer, had created one with partial information about Imani's culture. Imani created a more specific one, bringing particular knowledge about cultural symbols of power in her home country. Finally, another community member articulated another interpretation based on her personal experiences of migration. While the falcon did not have the same meaning for the three of us, the collage created a visual story where we are able to assign meaning based on our cultural or personal experiences. It is important to mention that none of these interpretations is taken as an incorrect way of reading the images. When presenting the postcards and the other artifacts we have designed with the collages, we always include the collage without explanation of the images on one side and the meanings that participants associate with the images about their own story on the other side. Thus, we use one side to start conversations about possible co-existing meanings related to migration and language justice; and at the same time, participants' interpretations of their own visual stories are always part of the design.

The act of creating collages through collaborative interpretation, as seen in this project, is connected to social justice. Through the process of visual translation, individuals can come together to share their unique perspectives and cultural knowledge, creating more inclusive and diverse narratives about migration and language justice. By valuing and respecting different interpretations of visual images, we can promote a more equitable society that recognizes and honors the diversity of human experience as well. In the context of migration and language justice, translation can be a powerful tool for promoting social justice by enabling marginalized communities to share their stories and perspectives in a way that is accessible and meaningful to a wider audience.

Conclusion

Collages can be used as a tool for the process and as an outcome of participatory design processes with multilingual communities. Before assembling the collages, discussing which images to include can prompt a meaning-making (or translation) process where participants share the stories they associate with personal or cultural visual references. Once the collage is assembled and shared back with multilingual community members, as a design outcome, the collage becomes a platform to expand the conversations about co-existing interpretations and to explore further meanings.

Using images as a form of language—a system of symbols and meanings—can help explore language access possibilities beyond written languages and address power differentials in design processes. This is especially true when these images are articulated in a format that is open to multiple interpretations such as collages. Making it clear to participants that collages have an ambiguous nature and that multiple worth-exploring meanings can be drawn from there reduces barriers of participation. Participants can bring any type of personal stories, memories, cultural references, and facts, among others, to start a disambiguation process where they make sense of the images. This openness to different sources and types of knowledge can be fundamental when working with vulnerable communities whose knowledges tend to be marginalized.

The collages not only helped participants to share their stories, but also facilitated their agency in adding different layers of meanings to the visualization of the stories. In this case study, I focused on the meanings around birds as they are the connecting and main elements in the collages. We used birds to visualize meanings in the intersection between participants' languages, migration, their personal experiences, and cultural backgrounds. However, it is important to mention that there were many other images that participants included in their collages related to two or more of these topics. For example, Abam, a multilingual community member from Ghana, shared about the Ghana Must Go bag, an iconic type of tote bag used by Ghanaians to pack their belongings when migrating. Jing, who was born in China, talks in her story about using language to feel connected to her hometown. To represent this connection, she wanted to include Chinese paper lanterns which reminded her of going to her hometown for the spring festival and being reunited with her family.

It is important to acknowledge that while participants decided on the images, they did not articulate them into collages. I was the one doing this in Photoshop based on their stories, the images they suggested, and my and the other researcher's interpretations and translations of the

participants' stories. As the collages were created digitally, assembling them requires technical skills that participants might not have. In future projects, it can be reevaluated how to facilitate that participants construct the collages. For example, using a printer to print the images and physically assemble the collages or using a software that requires fewer digital skills. However, the barriers are not only technical. For some of the interviews, multilingual community members welcomed us in their jobs in customer service or nail salons. Using a printer or a computer with an image editing software would not have been a possibility or would have interrupted their jobs in such contexts.

The translation of verbal stories into visual collages and back again worked as a participatory approach to visualize ways in which multilingual community members experience injustice. We did not focus only on stories of injustice but also on the multiple reasons why native languages were important to participants. Understanding why languages matter to people creates the ground to better understand how the lack of language access is negatively affecting their emotional and social well-being. As we share the collages in public events in North Central Florida, we seek to create awareness about language diversity but also about the regulations that guarantee language access. Information about these regulations, such as Title VI of the Civil Rights Act of 1964 and the Executive Order 13266, will be part of an upcoming exhibit where we will share the collages at the Matheson Museum of History in Gainesville. As we advance to future states of this project, I hope the visibility we are creating about language diversity can trigger changes in health, education, and safety institutions, among others, so multilingual community members can exercise their rights regardless of the languages they speak.[2]

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