

D1: Data Collection and Problem Framing Report

Team MOSS

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Executive Summary

In this design project, we aim to explore novel ways to increase and enhance cross-cultural exploration and connection; that is, how might we help enable people from different cultures to develop personal connections, understandings, and collaborations?

This problem persists due to three significant factors: homophily, structural/access barriers, and prejudice. These issues range from natural circumstances to complex, deep-rooted societal issues, which makes these factors ever more difficult to address.

As part of our secondary research, we identified existing solutions and potential practices to combat each of these. First, to combat homophily, social media spaces can be designed with diversity in mind. Algorithms can be designed to intentionally challenge people's preheld beliefs to combat echo chambers through serendipitous design (Reviglio, 2017). Practices in designing digital events can combat structural barriers in a number of ways, including virtual and hybrid events, asynchronous events and activities, and low-bandwidth options. Furthermore, advancements in technologies such as online translators have been instrumental in improving cross-cultural communication, especially during times of crisis (Tekwa and Liu, 2024). Psychology research has suggested that prejudice can be mitigated through contact between groups, and new research has explored novel ways to reduce prejudice through VR experiences (Tassinari et al., 2022).

We believe we can make the most impactful product by designing for young adults (ages 18-28). Our secondary research suggests this group would benefit the most from a digital solution to enhance cross-cultural connections, as they are particularly comfortable using modern technology, particularly emerging ones such as XR/VR, artificial

intelligence, etc. This is also a crucial age where many people are first entering university or enterprise, which may be their first exposure to people from a diverse set of backgrounds and cultures.

Our key stakeholders are people, groups and organizations who facilitate cross-cultural interactions. Universities and student clubs act as hubs for diverse student communities as studied through our observations, but face challenges in managing events, increasing participation, and measuring impact. Cultural organizations create safe spaces for cross-cultural exchange and can help with insights. However, they need tools to streamline planning and maintain engagement (Alsaleh, 2024). Employers (including HR teams) run diversity and inclusion initiatives yet may struggle to streamline processes, reduce administrative burdens and measure outcomes (Universum, 2024).

Key Gaps:

According to our observation, secondary research, and interviews, we have identified the gaps existing in current cultural mixing methods including:

1. DEI training (both digital and non-digital) mostly fail to encourage mixing because they are often mandatory, short-term, and focus on individuals' internal implicit bias rather than systemic issues.
2. University orientations are deficient because such events unintentionally create an asymmetrical burden on international students and usually fail to encourage consistent, long term connection.
3. Social media as a method of encouraging cultural mixing failed because it's only capable of building superficial connections for most of the time.
4. Language exchange platforms fail in encouraging cultural mixing. The primary interaction on language exchange platforms is linguistic learning and correction, not social or emotional sharing, keeping the relationship transactional and fragile. Research reveals significant misuse issues, with users often treating these platforms as dating or social networking tools rather than genuine language learning tools (Wardak, 2024; Topal, 2024).
5. Collaborative gaming platforms also failed to build deep connections among players from different cultural backgrounds because of the competitive nature of the interaction within these platforms and the random matching, short term collaboration system.

Initial Design Directions

1. "HMW use micro-tutorials to help newcomers feel more confident to join cultural activities smoothly?"
2. "HMW structure event formats around shared activities such that it encourages genuine connections across cultures through more personal events?"
3. "HMW make it easier for people to approach new groups and reduce their social anxiety and hesitation?"
4. "HMW gamify experiences which makes it more engaging for younger audiences to engage in cross-cultural connection?"

User Requirements

1. Support connection through shared interests and activities
 - Users form bonds over common interests, goals and activities. Therefore, a solution must leverage shared interests (physical and digital) to bridge cultural divides.
 - Observation note - A group of people belonging to different ethnicities sitting outside Asian Fusion restaurant, trying out Asian food.
2. Ensure balanced cultural representation

- Users expressed frustration with feeling excluded. A solution must value all cultures equally and promote inclusivity. *"If someone takes an approach that only their culture or their background is correct and valid, that is a bit frustrating. Both parties should be open to learning."* - P1, 23 years old, Indian student
3. Encourage intentional and meaningful cross-cultural interactions
 - Participants expressed the desire for genuine connections across cultures. The solution should create safe, supportive environments (online or in-person) for respectful, curiosity-driven exchange. *"I think people definitely stick together in their own communities, or what they're comfortable with. I like to ask questions and get to know people and their culture."* - P2, 25 years old, Somali student
 4. Have a low barrier to entry
 - Many users want a natural and accessible and not forced.
 5. Embed learning and teaching opportunities
 - Many users saw cultural exchange as a way to learn new perspectives and activities. A solution should embed learning features into cultural contexts.
 - Observation note - Students reached out to others to learn garba dance steps at the Indian cultural event so they could join the dance

Next steps - We will be leveraging our insights from secondary review, interviews and observations to move to the brainstorming phase. We will ideate on ideas and then develop design concepts.

User Research

Observations

Medhavi Sabherwal

Observation 1: Raas Ratri Garba Event, Exhibition Hall; Saturday, September 13; 6:45 pm - 8:03 pm

Notes

Observation 1 - RAAS RATRI GARBA EVENT

6:45

People standing outside exhibition hall
in line, waiting to enter.

Some girls getting photos clicked,
twirling around.
Everyone dressed in Indian outfit -
Lehengas with accessories and
colorful scarves.

2-3 volunteers of India Club checking
wristbands and giving out a
wristband.

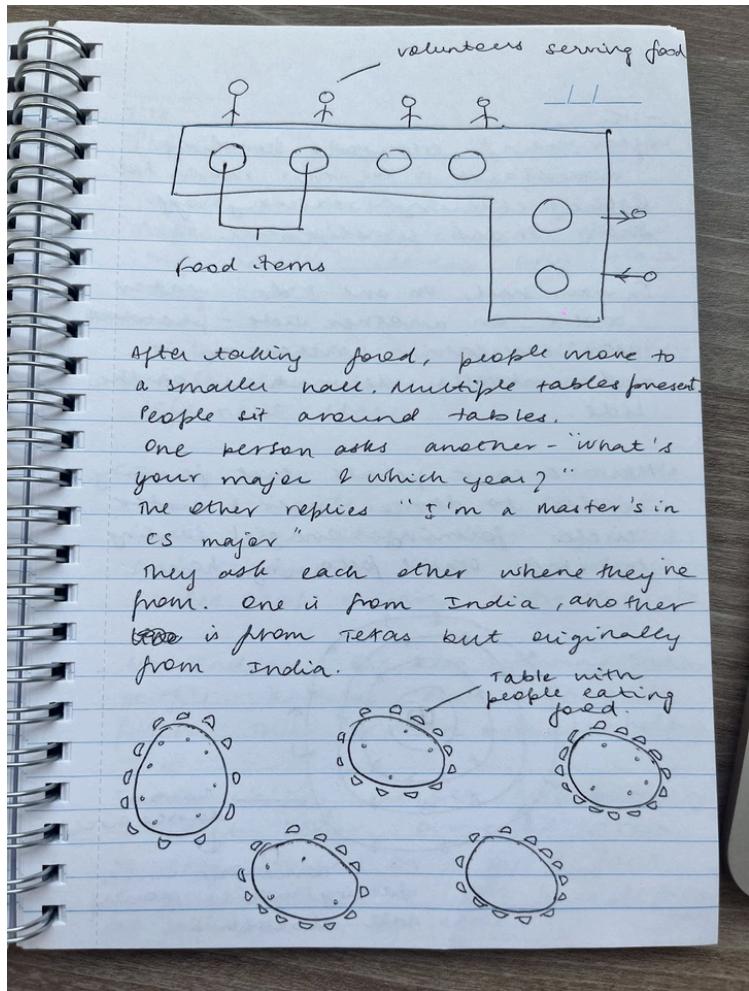
After entering hall, one volunteer
directed everyone to the upper
floor for food.

7:03

Multiple utensils, one person next
to one utensil, serving food.

Food - Dal, paneer, kofta, paloda,
naan, rice.

Refilling some utensils as & when
food is over.

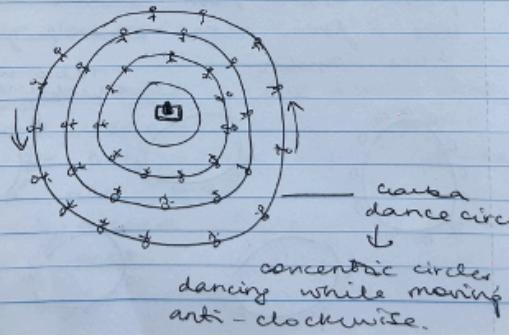


7:15

after eating, everyone heading downstairs to the main hall.
Before entering, taking off their shoes & slippers.

In main hall, on one side - water cooler. On another side - photobooth with 'Raas Satri' written on it and umbrella decorations on the side.

Main area - people start forming circles to dance. Inner & outer circles forming. One girl leading the steps. Others following her.



7:18

11

People are struggling to understand the steps, asking their friends. Friends are teaching step by step. People are joining circle anytime they want, leaving any time they want.

Smaller circles on the sides where people are doing their own different steps.

In the main circle, innermost circle has 3-4 girls who are fluent with the steps. Shouting 1, 2, 3 and explaining steps while dancing. Circles keep moving anti clockwise.

Non-Indians are also wearing Indian outfits - khangas and trying to follow. Their Indian friends helping.

7:20

In the circles, people keep bumping into each other - crowded area. Someone stepped on a girl's foot, she goes to the side. 2-3 friends follow her, she sits down on the side.

11

different circles during different steps. Garba songs playing.

7:38
One girl announces on mic that they will do aarti (devotional prayer) so they stop music. Everyone collects around a table with photos of God & Goddess. Devotional song plays in background and a plate is rotated in front of the Gods to pray.

7:46
After the prayer, 2 girls stand on one side and put tika on forehead & give prasad (food offering). One by one, they do it with a lot of people.

8:03
Garba songs start playing again and the circles continue. Some people joined the circle, trying to follow the steps other people helping them (might be strangers).

Summary

Garba is a traditional folk dance and celebratory ritual from Gujarat, a western state of India. It is performed during the Hindu festival of Navratri; dancers form circles and move rhythmically to devotional songs. I chose this event to understand how people of different cultures connect through shared activities. I aimed to observe interactions between Indian and non-Indian participants, as well as between Indian participants from Gujarat and other states, since cultures vary widely across India.



Students lining up to enter the event



Students clicking photos in their traditional outfits

When I arrived at the venue, there were groups of people outside taking photos in their traditional outfits (lehangas, which are long skirts worn to Garba events) and twirling around. A few volunteers from the India Club were checking tickets and BuzzCards and distributing wristbands to the attendees. Guests were first

directed upstairs to the food area, where volunteers served Indian dishes. People sat together in a separate room to eat, introducing themselves and asking about each other's programs and where they were from.



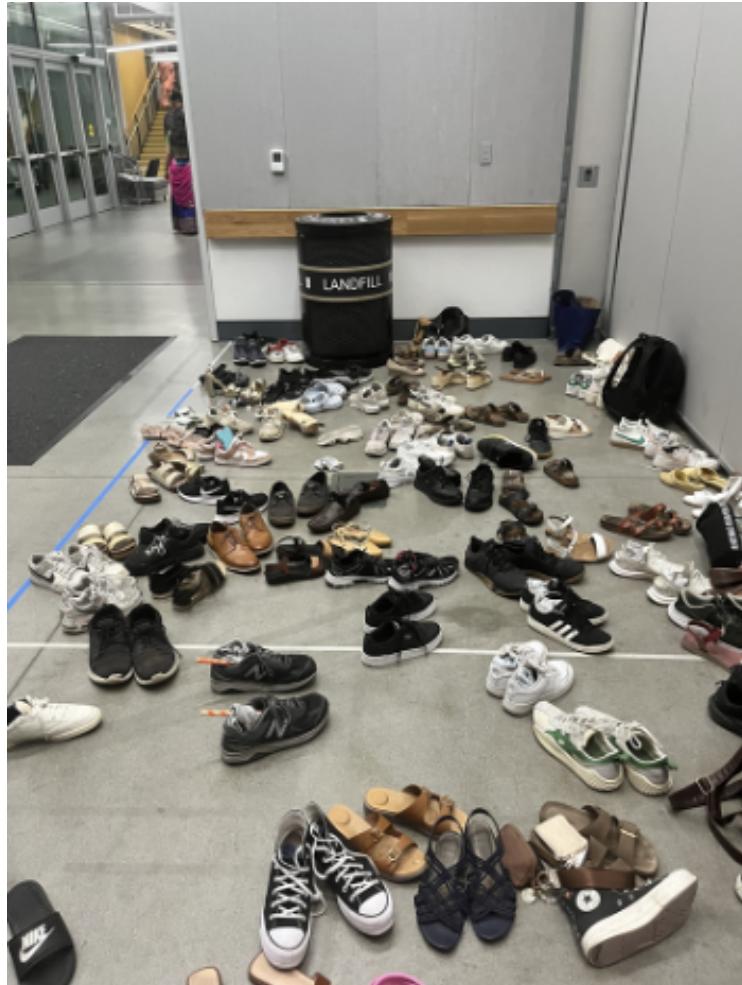
Volunteers serving food to attendees



Indian dishes such as Dal, Paneer, Naan, Pakoda — food is a key part of a cultural event

After eating, everyone went downstairs for the Garba. There was a room where everyone took off their shoes before entering the hall. Inside the hall, there was a photo booth decoration in one area and water coolers in another. The center of the hall was utilized for dancing. People formed multiple concentric circles for dancing. Some girls knew the dance form and led the steps while also trying to teach others. Those new to Garba tried to follow along. On the sides, I could also see people teaching their friends the steps. Some people in the circles started doing their own variations of the dance. Many struggled to follow the steps,

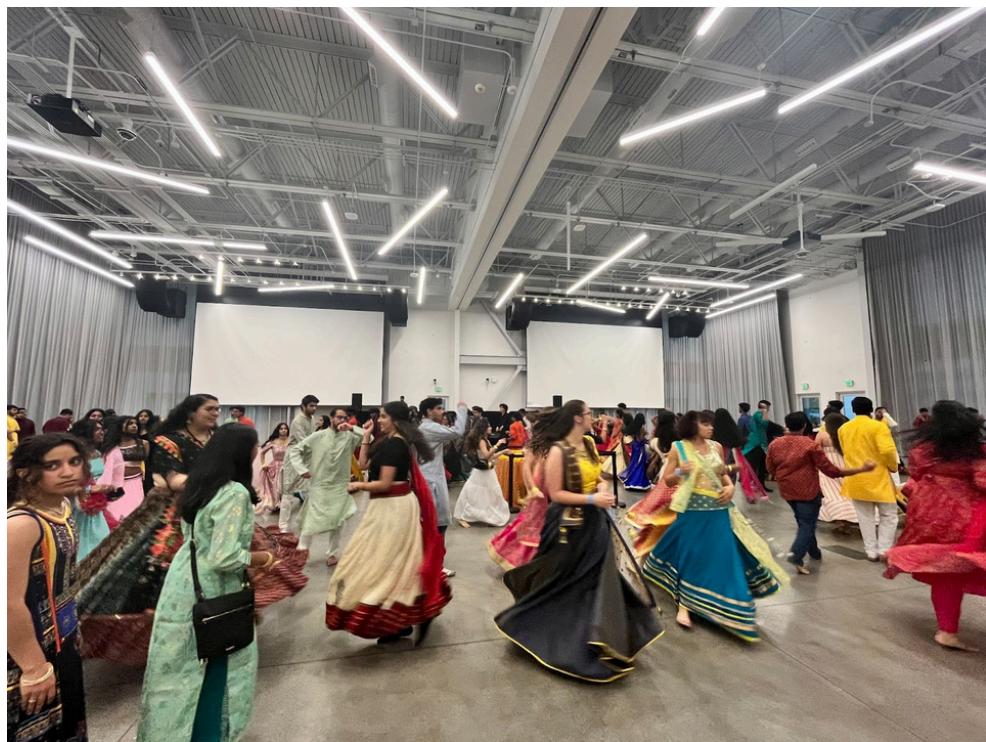
which can be difficult to pick up quickly. People freely joined and left the circles, and the space was very energetic and lively but also crowded, with people frequently bumping into each other. Non-Indian attendees also wore traditional outfits and eagerly learned the steps from their Indian friends, making the activity a shared cultural experience.



All students left their shoes outside the hall — interesting as even people who are not from India followed the tradition of not taking shoes into the hall where an auspicious event is happening.



Learning how to do Garba — interesting as people are teaching each other.



Students dancing in circles and doing Garba



Prayer during the event

After a few Garba rounds, the music stopped, and they started doing an Aarti (devotional prayer) in front of a table where the photos of Hindu gods and goddesses were placed. Thereafter, attendees received Tika (a mark on the forehead) and Prasad (food offering). Once the prayer was done, the songs started playing again, and people continued dancing.

Observation 2: Tech Green; Sunday, September 14; 1:00 pm - 1:15 pm

Notes

Observation 2 - Tech Green Road

~~10:30~~ 1 pm

2-3 stalls here - one for food - Takoyaki,
1 for India Club, 1 for Freedom of Expression

1 student is talking an interview of
another student - he has a mic in his
hand. Another student with him has
a camera and is recording.

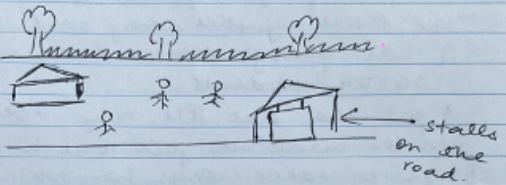
2 students are sitting and discussing
their class work.

A girl is distributing Oktoberfest
fampionships saying that it'll happen
from 20th Sept to 25th October at
Der Biergarten. She's saying there
will be food, beer and games.

1:07

A girl is telling another student that
she's from John Creek High School.
The boy says he knows a lot of
people because there are people from
that school in his fraternity. He'll

11
asking if she knows a caricature. They
are discussing which all mutuals
they have.



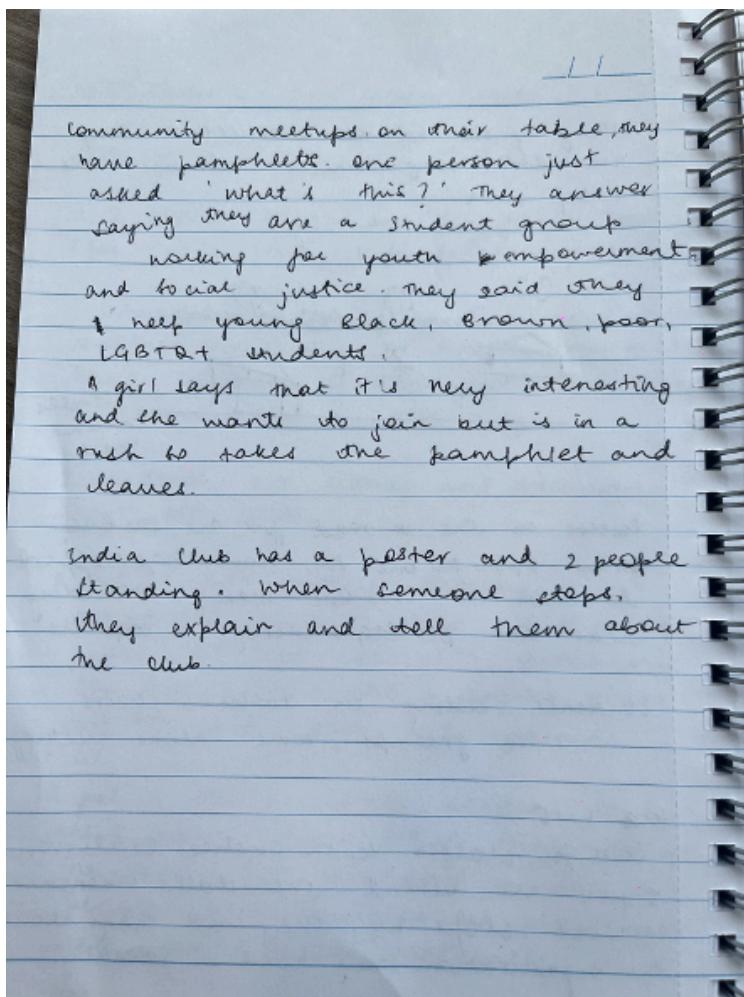
1:10

Posters on the road for the See Baby
crow app. No one till now has stopped
to look at it. One man is standing
near the posters, wearing a ~~cap~~ hat.

Students sitting on tables & chairs,
some in groups, some alone working.

~~1:16~~ 1:16

Stall for Georgia Youth Justice Coalition
2 girls are behind one stall. Whenever
someone stops by, they tell them about
the organization. They hold bi-weekly



Summary

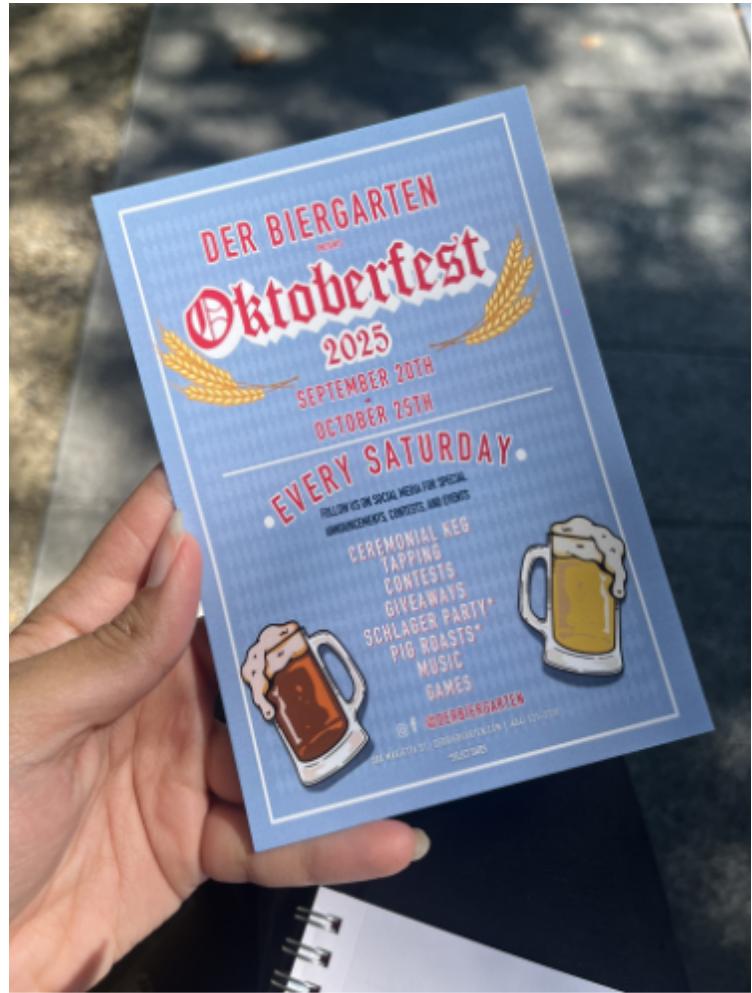
I chose to observe Tech Green road, as it is a high-traffic area where many students pass through, and there are multiple stalls set up, which encourage student interactions. I observed 3-4 stalls—one for food (Takoyaki), one for the Freedom of Expression organization, one for the Georgia Tech Youth Justice Coalition, and another for the India Club.

A girl was distributing Oktoberfest pamphlets, explaining that students could get discounts and enjoy food, beer, and games. Oktoberfest is a German cultural event. I also noticed a student taking an interview with another student - he had a mic in his hand and was accompanied by another with a camera. In a separate interaction, a girl was talking about her high school with another boy. He said he knows a lot of people from that school who are now in his fraternity. They discuss their mutual friends.

There are posters displayed along the road for the See Baby Grow app; however, people do not stop to look at them. There was also a stall for the Georgia Tech Youth Justice Coalition. Two girls were behind the stall, and whenever someone stopped by, they talked about the organization and its mission. A girl comes to ask what it's about, and they explain about working for youth empowerment and social justice, helping Black, Brown, poor, and LGBTQ+ students. The girl expresses her interest in joining, takes a pamphlet, and leaves. The India Club also had a poster and volunteers stationed next to it to explain the club's activities.

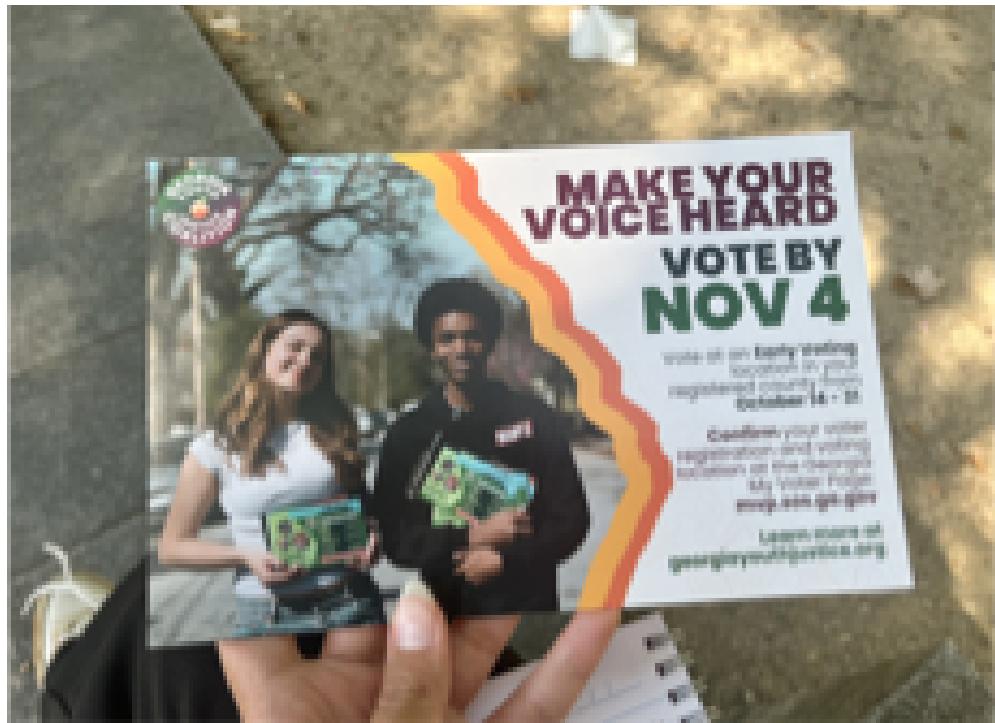


Posters along the road for ‘See Baby Grow’ app — interesting to see that no one was stopping to look at it as it might not be relevant for college students



Pamphlet distributed for Oktoberfest — interesting as the girl used a communication media to spread awareness about the event





Two students explaining about Georgia Youth Justice Coalition, along with their pamphlet — interesting as the organization focuses on cultural mixing as well





Food stall and students ordering their food — the food is Asian, however people of different cultures are trying it out and enjoying it

Observation Reflection

Observations are real-time experiences and behaviors of what people are actually doing, rather than how they might describe it during an interview. It was helpful, as these observations gave me firsthand insight into people's real-time behaviors, interactions, and decision-making in public and cultural spaces. It showed the nuances of interactions, which are difficult to explore through secondary research or interviews. For example, I noticed how during the Garba dance, newcomers were hesitating before joining the dance circle, how non-Indian participants relied on their friends to learn the steps, and how the space was navigated. At Tech Green, I noticed how some students passed by stalls without stopping, while others engaged with the volunteers proactively. Such behaviors are often not self-reported, as people rarely think about these moments. I thus learned how important it is to be in the field and observe.

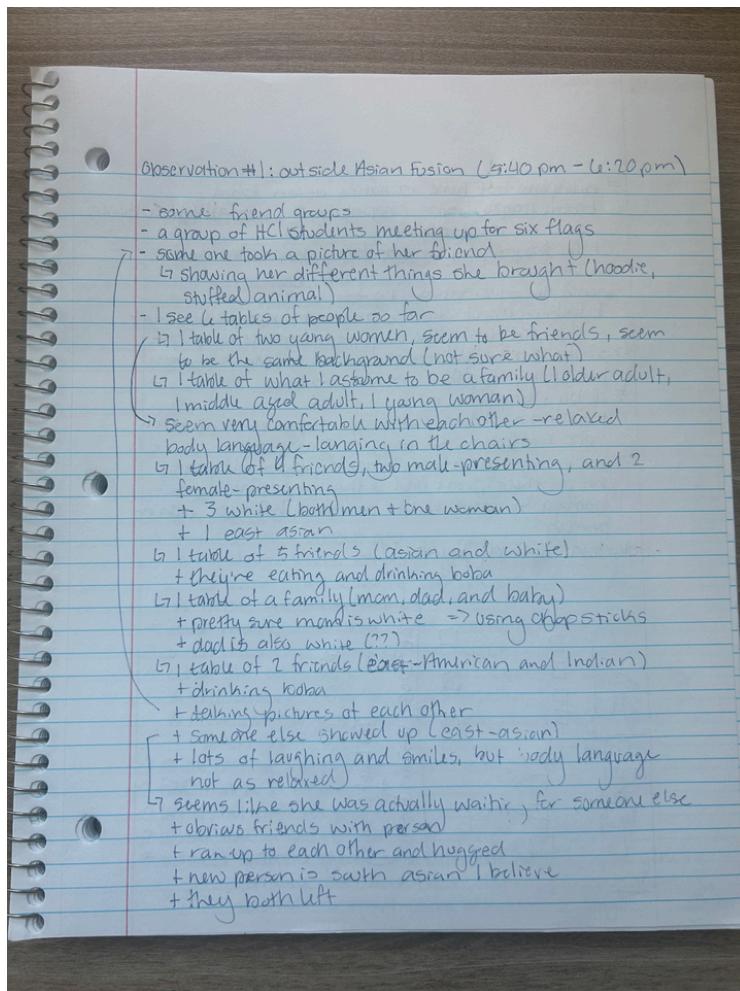
Observing these environments in real time shaped my design judgment. At Garba Night, watching non-Indian participants become confident after their Indian friends taught them the steps highlighted the value of peer learning in multicultural contexts. This idea can translate into onboarding features or peer-support groups in a digital tool. Similarly, seeing students at Tech Green ignore certain posters but stop at certain stalls showed me how crucial active engagement is for outreach, which could inform the design of more interactive communication strategies.

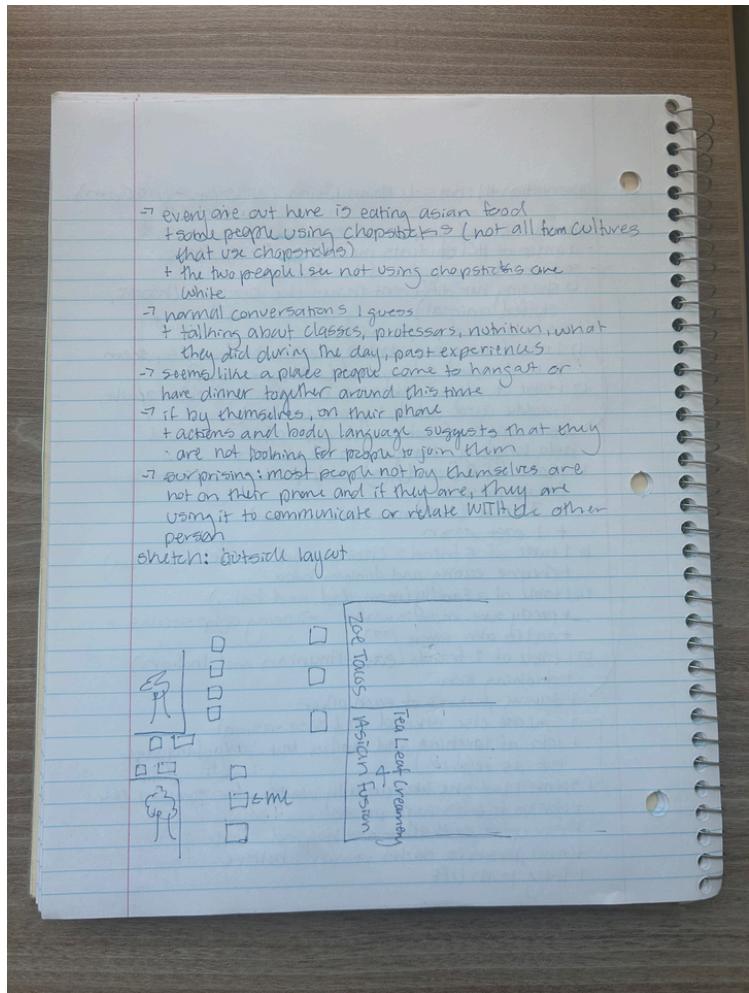
If I were to conduct observations again, I would position myself in different places rather than observing from one spot so that I can capture different aspects of the experience. I would also pay closer attention to the nuances, such as how long people linger at stalls or how quickly they join a dance circle after separately learning the steps. This would help me improve as a professional observer who can collect rich data.

Olufunmilola Obielodan

Observation 1: Outside Asian Fusion; Friday, September 12; 5:40 pm - 6:20 pm

Notes





Summary

I conducted my first observation outside the restaurant Asian Fusion on Friday, September 12, 2025, at 5:40 p.m. During this time, I mainly observed groups of friends gathering to eat dinner, along with some people meeting up before heading elsewhere. Over the course of the observation, I noticed about six main groups. These included a pair of two friends who appeared to share the same cultural background and seemed very comfortable with each other. They were lounging in the chairs, and this relaxed body language suggests great familiarity. There was also another pair of friends that came from different cultures. While they also appeared to be comfortable with each other, their body language was not as relaxed. Although I cannot say for sure whether this difference was a function of their cultural backgrounds, personalities, or the nature of their relationship, it is something I think is worth noting.

I also observed a group of about five women seated further away and a group of four (two women and two men) right in front of me. Both groups were culturally diverse and seemed to just be enjoying time together and eating dinner. The other two groups seemed to be family units: one a three-generation white family consisting of a grandfather, father, and daughter, and the other, a couple with a baby. Overall, most groups were culturally diverse. Everyone was eating Asian food, and several people, even those who were not Asian, were using chopsticks. These scenes reinforced the idea that people connect to each other and to other cultures over food, something that was mentioned in many of our interviews.

The overall atmosphere was lively, with lots of laughter, smiles, and conversation. I overheard people talking about classes, professors, nutrition, daily activities, and past experiences. For those who were alone, their body language, such as wearing headphones or staying on their phones, suggested they were not looking to socialize. On the other hand, people who were in groups were highly engaged with one another and rarely on their phones, instead using the time to connect in conversation. If they were on their phones, they were using them to relate with those around them.



This picture shows the diverse groups outside of Asian Fusion.

Observation 2: Blueprint Church; Sunday, September 14; 10:00 am - 12:00 pm

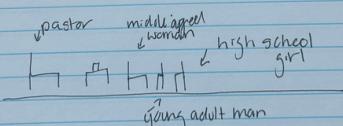
Notes

Observation #2: Blueprint Church (10:00am - 12:00pm)

- (10:00 am) - worship started
 - * 1 man (black) + 3 woman (2 black, 1 white)
 - different styles of worship all around the room
 - * some more animated → jumping, louder, clapping, raising of hands, kneeling
 - * some less animated → clapping, stepping / swaying back and forth, raising of hands (but not all the way up)
 - * solo just standing and clapping
- (10:25 am) - start of service
 - * black pastor * white wife
- (10:29 am) - showed a video of history of the church
 - * wanted to be an urban church + planting hub
- pastor was not raised in church
 - The church is all about discipleship
 - * goal is to be the last generation of people who have to leave the urban context to get sound discipleship
 - when pastor was younger, there was a sentiment among young black people that Christianity was either for old people or the white man's religion
- uses a lot of music during the service
 - * showcased a "Sound of the time" sign at each point during the history
- talked about hearing stuff that is culturally relevant but ALSO doctrinally (Biblically) sound
 - * understanding the Bible in your hearts' language
 - * in Blue Sunday, someone would rap a song and then preach a message
- I am sitting at a table of 6
 - * 2 men (1 black, 1 white) + 4 women (1 white + 2 black)
- (10:39 am) - showed us a video of his first church
 - * life line (1984 - 2007)

★ "United in diversity"
★ a video showing multiple ethnic groups (well 2)
- (10:44 am) - video of the "era of multiplication"
★ talks about planting churches
★ talks about missional communities → families living
and doing ministry together
+ diverse (Saw asian, white, black in video)
- used musicality to present the scripture (has a beat behind it)
- (10:50 am) - another black man joins my table
- The church's aim
1. we are in Christ
2. we are made new
3. we are ambassadors → ministry of reconciliation
4. we are ambassadors → making His appeal
- at some point the pastor said "no one should be sitting alone!"
- (10:56 am) - table discussion
★ everyone is engaged and comfortable talking to
each other
★ we are connecting over the questions and answers
- (11:00 am) - asked the church to share with the entire
congregation
★ people speaking up and showing out answers
★ body language around the room shows people are
engaged (nodding along with what's being said)
★ every culture present is involved, no one seems left out
- "we are responsive for one another!"
- (11:04 am) - started what I'd call a talk show session (?)
★ when two people talk to each other on stage but in
front of people?
★ talking about city groups
★ made the atmosphere more relaxed
★ pastor also wearing a sweatshirt, a hoodie, and Jordans
(not usual in my experience)

- city groups \Rightarrow find a group of people to connect with
and that will challenge you to grow
A biggest thing is that they want you to feel connected
★ part of the requirements of being a covenant member
is being assigned to a city group
↳ so no covenant member feels alone
A "This one is closer to me, but I really vibe with these
people!"
A who are you responsible for and who is responsible
for you?
A if you don't have those people, you are coming to church
but you are not apart of the church
- (11:00 am) - stage / scene change \rightarrow a panel??
↳ literally had alternating slides about music
A had people at different stages of life come up
+ 1 girl: high school student + 1 woman: mother, wife, physician
+ Iranian: husband, barber \rightarrow not sure of race or culture
A however, they are all able to discuss the questions
asked based on their context and connect themselves
and the congregation
- (11:30 am) - transition again
A pastor brought wife onstage (she's white)
↳ talk about being generous stewards
A talked about having people (not farm) living in their
home to disrupt norm
A they have six children
A being in the neighborhood to be in the community you are
ministering to
↳ do hospitality to create a space where change
can take place \Rightarrow where an enemy can become a
friend or brother or sister
A intersection and not addition
+ invite people into the realities of your life (meals, laundry,
grocery shopping, etc.)

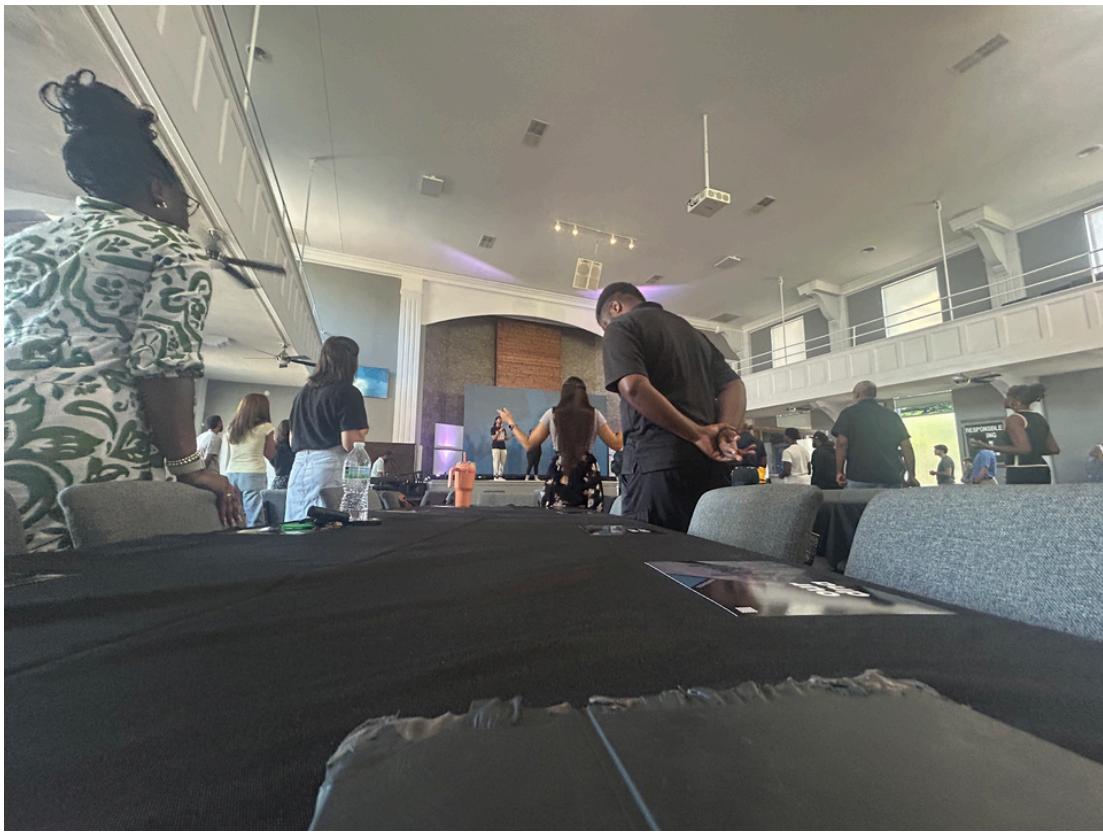
+ be intentional
+ invite people into relationship
· A engage with your community
- (11:40 am) - Q+A session
↳ again, everyone is comfortable asking questions
A a church that wants to look like the city
A people are often converted to the Christian community
before they are converted to the Christian God
A how are you inviting your coworkers into your space
- also just realized there was an Asian couple behind me
- (11:50 am) - a black couple came up to the stage to
discuss their story
A also kind of like a panel, but quick cause it was
time to close
- (12:00 pm) - closed out service with a (rap) song
A like the man from the course PERFORMED LIVE
A Hispanic woman came to the front to worship
A worshiping to different kinds of music
- sketch: how stage was set up for panel


Summary

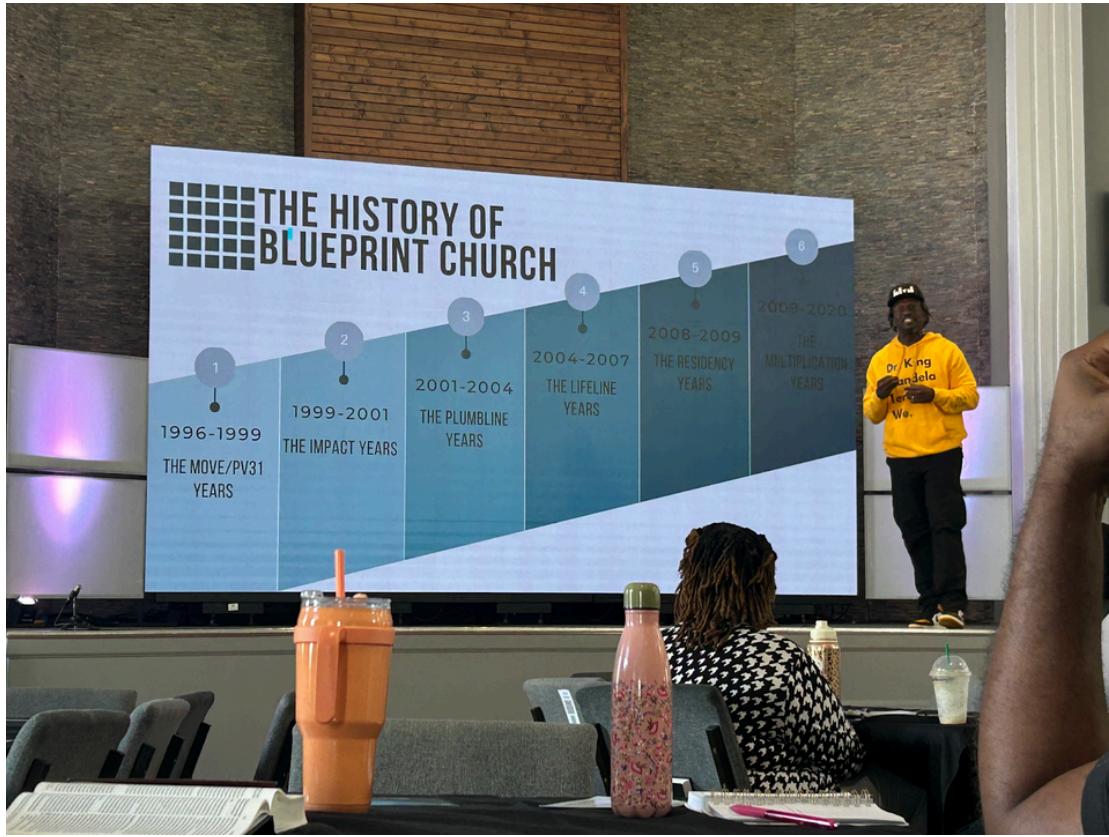
I conducted my second observation at Blueprint Church on September 14, 2025, at 10:00 a.m. Blueprint is an urban church in Atlanta with a diverse population. During my time at the service, I observed the actions of the people around me and the flow and content of the service. This particular service focused on the “DNA” of Blueprint, highlighting the church’s values and identity. The service began with worship, which was led by a multiracial worship team. I noticed that worship styles varied widely across the congregation. There were more animated worship styles with people clapping, jumping, and raising hands and more quiet forms of worship with standing or swaying and light clapping. Even after worship, music played a very significant role throughout the service, often being used as a way to connect scripture and culture.

Worship was followed by the main message. This message was given by the pastor of the church, who is a Black man in an interracial marriage (he is married to a White woman). The pastor emphasized the church’s mission of discipleship and remaining rooted in the urban community. One of his personal goals is to be part of the last generation that has to leave the urban context to find sound teaching. Throughout the service, the pastor highlighted the church’s history with different videos, beginning with his transformation in college and showing its growth into a church for planting and multiplying. Their objective is to create diverse missional communities. There were also table discussions, where the pastor asked us to engage in conversations with those sitting at the table with us. These encouraged interaction among the congregation (which was very diverse in nature) and created a sense of belonging. After this, there was a presentation about “city groups,” where members connect in smaller, neighborhood-based communities for growth and accountability. This showed the emphasis on fellowship expressed by the church.

The service also included a mix of elements such as panel discussions, Q&A sessions, and personal testimonies from members at different life stages. These presentations emphasized themes of hospitality, stewardship, and engaging authentically with one’s community. The pastor and his wife even shared their own routine of opening up their home for discipleship, stating that for the 24 years they have been married, they have had someone living with them for at least 18 of them. This highlighted the church’s belief that sharing your life with others is the best way to grow connection and relationship. The service ended with one of the leaders performing live rap, again showcasing diversity in both leadership and participation. Overall, the church service was highly interactive, inclusive, and centered on building deep relational connections within the congregation and the broader community.



This picture shows the different worship styles and the diversity of the congregation.



This picture shows the pastor of Blueprint giving a message on the history of the church.



This picture shows the pastor and his wife during the Q&A session.

Observation Reflection

The observations gave me the chance to simply sit, slow down, and pay attention to what is happening around me, and I noticed small details that I may have otherwise missed. For example, when I was outside of Asian Fusion, I noticed people's body posture and the difference that can make in the tone of conversation. At the church service, I saw how intently people were listening to the speaker during the discussion session, something I might have overlooked if I had just been a participant. Observing also helped me understand more deeply what people express in interviews or what I read in literature; when someone says, "It would be weird if I was in a group and someone came up to talk," I can now better empathize with that feeling because I've seen similar dynamics play out in context. While I was outside of Asian Fusion, I observed something that reinforces this. When a third person joined two friends, though they were all clearly comfortable with each other, the flow of their conversation paused until she left, clearly shifting the dynamic.

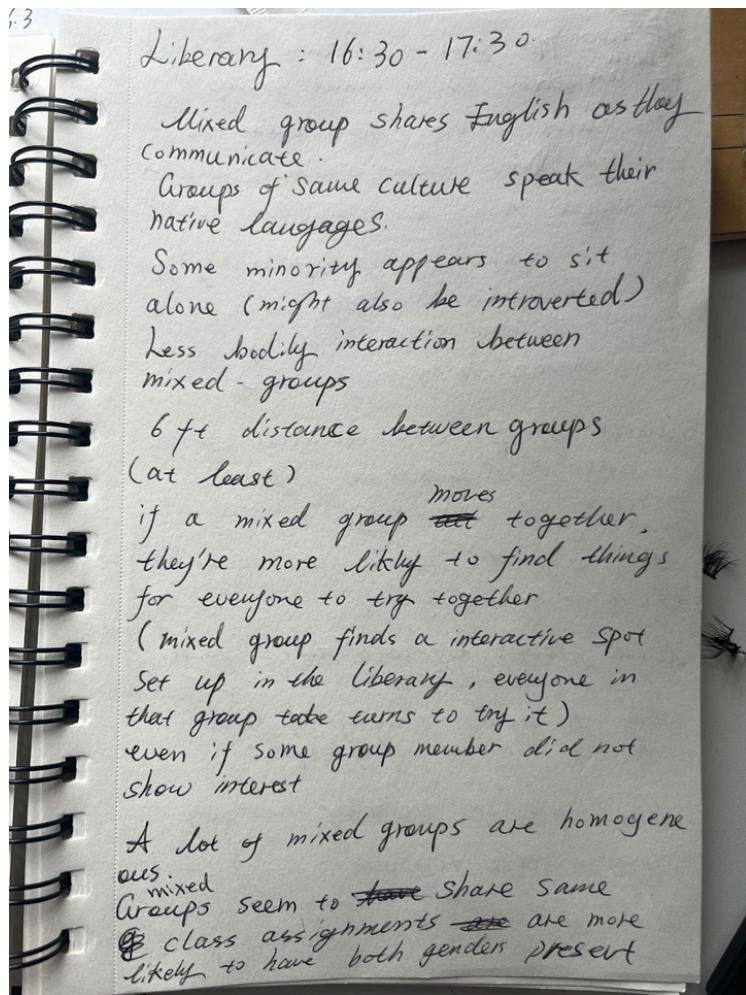
In hindsight, I see ways I could improve my approach for the next time I do observation. Moving around would help me capture perspectives I missed; especially when tables or groups were farther away, it was hard to get a clear picture of the dynamic. In more structured settings like church, I would choose a spot that allows me to observe the whole space more fully. I also realize the importance of coming in with a clearer plan for what I want to focus on. This time, I just wrote down everything that I saw. However, in doing this, I risked missing key details. Additionally, I struggled to know where to start with my observation. A classmate who

was there gave me some suggestions that helped me get started, but next time, I'll be more intentional. These experiences showed me how much richer my design judgment can be when I see behaviors in context rather than relying only on what people say.

Sizhe Luo

Observation 1: Georgia Tech Library; Friday, September 12; 4:30 pm - 5:30 pm

Notes



~~If~~ two ppl from the same cultural
~~then~~ are both in a mixed group,
it's more likely for them to
switch ~~to~~ to their shared native
language from an English context.
even if other english speaking ppl
are still around (~~they~~ some of them
appears to not care, some of them
show expression of confusion)

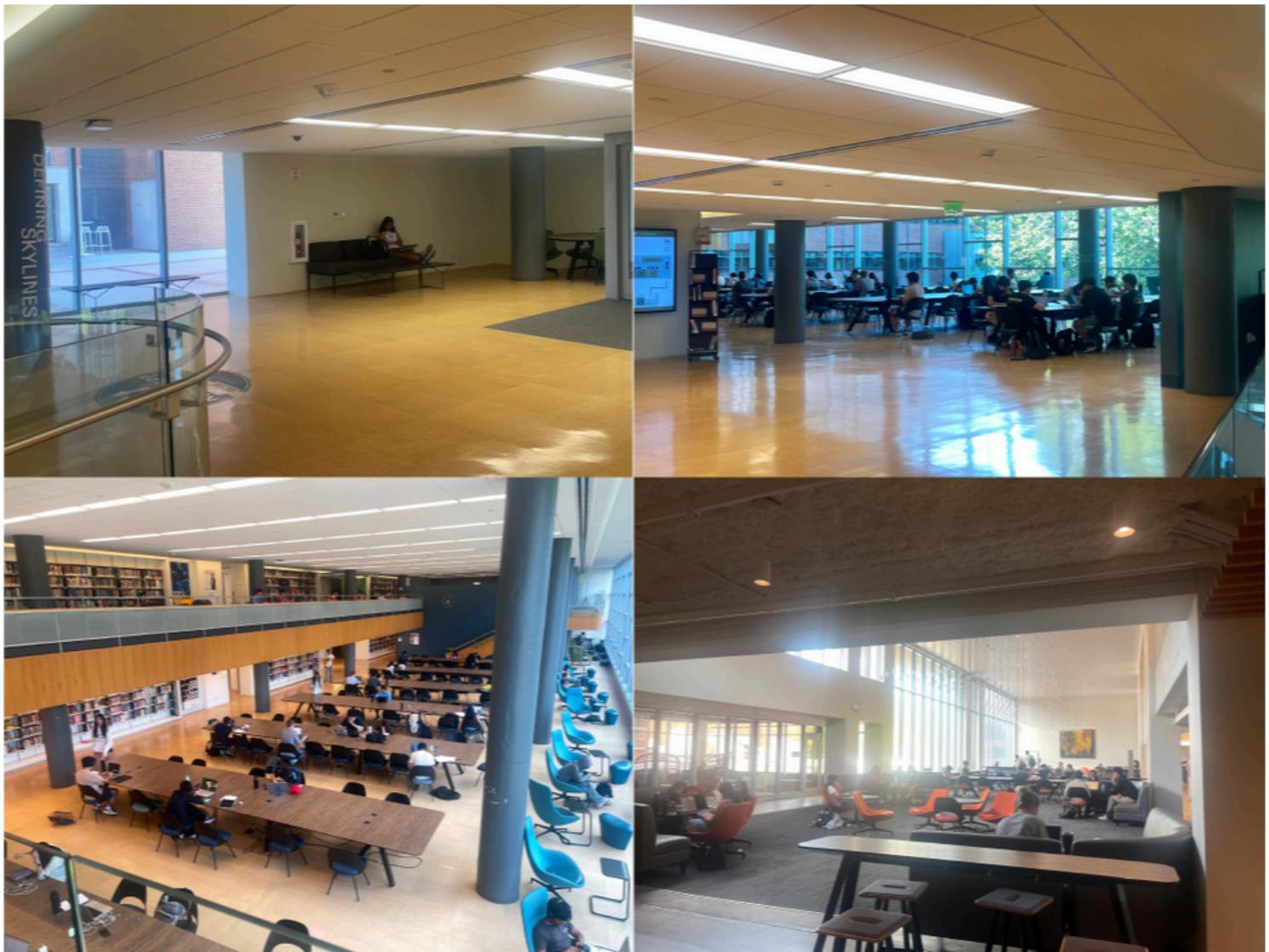
Mixed groups are located more
in the collaborative spaces
instead of Quiet Zones
(most)
Mixed groups don't act as wild
as Non-mixed groups

Mixed groups try each other's food
(exchange) ^{Snacks}
~~If~~ A greater variety of food
choices in mixed groups.

Mixed groups usually work on
class projects together

Mixed

Summary



(P1-Row1, left): This picture shows how some individuals who work/study in the school library prefer quiet places away from the crowd.

(P2-Row1, right): This is the second floor study area, showing different seat arrangements and a few different types of culturally mixed groups.

(P3-Row2, left): This picture shows how people sit with a huge gap between each other or between different groups on the third floor public study space.

(P4-Row2, right) This picture shows that groups keep distance from each other on the first floor common area. And the groups are mostly formed within people from similar cultural backgrounds.

The library is designed as a multi-purpose facility serving as a quiet yet socially dynamic environment where students from diverse cultural backgrounds share the same space but interact in different ways. Students mostly gather in the library for coursework; most students work individually or in small groups formed around their academic tasks, often with peers from similar cultural backgrounds or linguistic backgrounds. For example, international students are observed to gather with friends or classmates who come from the

same country or speak the same language as them, while most domestic students tend to gather with friends or peers who are also domestic.

As in this specific field observation, cross-cultural interactions were limited and usually happened based on practical needs such as group projects, technical support, asking for directions, sharing equipment, or coordinating study space. These collaborations appeared situational instead of intentional. Basically, performing functional and brief activities, lacking deeper social engagement and personal connection.

However, people interact differently according to different settings in the library. For example, more cross-cultural interactions occurred around Blue Donkey Coffee; these interactions are more random, voluntary, and not function-based, with a focus on building personal connections naturally with each other through small talk and food/beverage sharing. People are also more likely to approach strangers and ask questions about their food or drink or whether someone speaks the same language as themselves. The study zones were observed to have occasional cross-cultural interactions; the reason might be that team projects require diverse team members from different cultural backgrounds.

Overall, the library fosters a coexistence between different cultures instead of strong interrogation. People respect each other's presence and the needs of public space, but they're not necessarily seeking opportunities to connect or meet new people. People in this space tend to not cross cultural boundaries unless prompted by academic needs. This suggests that although the school library is a designated public hub, it is not designed to be a socializing/networking space; additional design interventions are still needed to encourage meaningful multicultural connections.

Observation 2: TSRB HCI Lounge; Friday, September 12; 11:30 am - 12:05 am, 2:45 pm - 3:30 pm

Notes

Field observation: Mixed Culture group meeting in HCI lounge

4 ppl sitting around the desk

3 Asians / caucasian.

+ 1 Asian (TA)

1 caucasian male talking for the most part, leading conversation.

1 female (Asian) sitting by him consistently give feedback / reaction through body language.

others nodded. 1 drifting away mentally.

4 group member listen / focus when TA talking.

Caucasian male & Asian female ^{who} sat by him gave responses & reactions with sound. Verbal

other 2 were majority quiet.

- ppl w dif cultural bg react / express focus through different ways.

Leader of the meeting basically lead through asking questions & reflecting.

~~to keep~~ make sure everyone ~~was~~ is on the right track.

- ppl in the same program has a deeper connection that might have helped with interaction.

- only asked a few questions.

- Not necessarily giving their own thoughts.

Mainly

Ppl are a bit more open to conversations (casual conversations) when they're ~~are~~ not working on group projects.

XXX
natural conversations, more about personal life, late comes naturally join group conversations, talking more about: interest, hobbies in common.

ppl in the same program for over 1 yr.

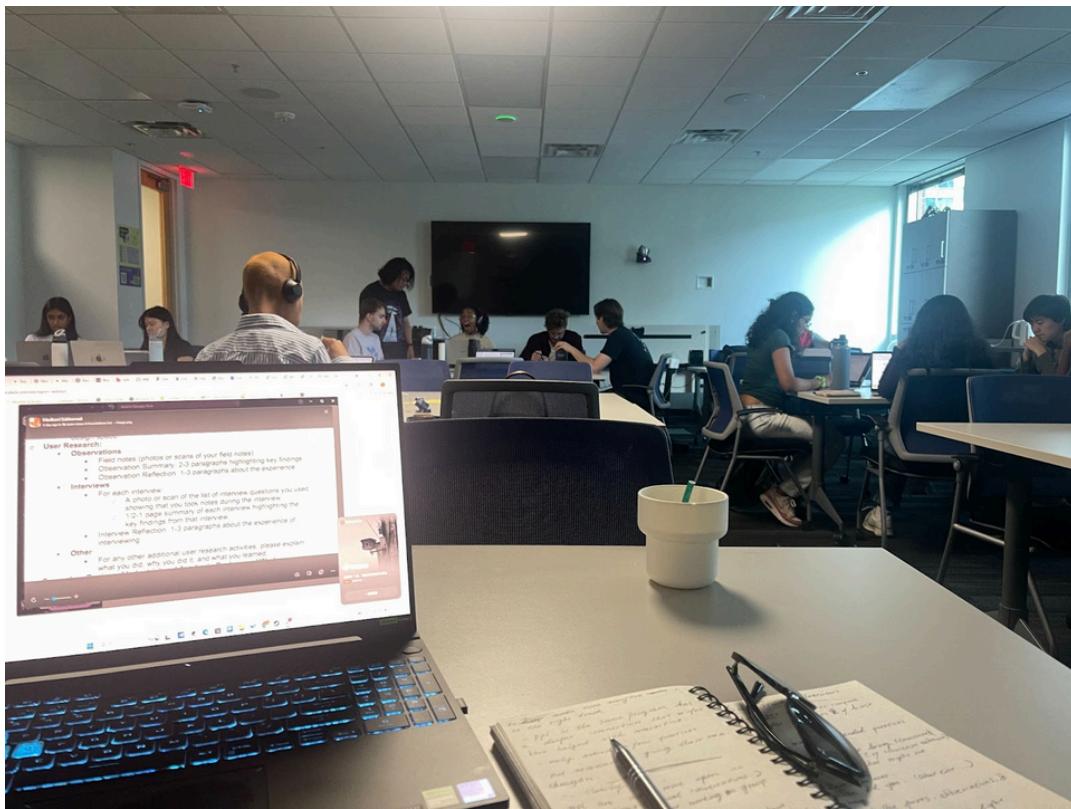
ppl are more comfortable around ppl who they already knew

~~Then~~ 2 ppl comes in and sit around an unoccupied table, with food, did not sit right beside each other, they sat down on ~~the~~ opposite sides, occasionally communicate, based on food related topics.
"yum" "this is good" males
2 more male joined them. 1 with food & drink.
the one who came in later with food offered to share his food, the other 2 also started to share their food. they also offered ~~to~~ the other person who didn't bring food
They comment on each other's food and started a conversation based on different food culture.
(since they have a variety of food on the table, American fast food, pad Thai, Asian fusion)
Topic drift from food to American movies and animations.
More people come in, automatically join conversation.

Summary



A group of mixed-culture students gathering for a group project meeting. In this photograph sitting arrangement and actions of group members are shown.



This photograph shows how the number of people noticeably increased compared to the earlier session, it also displays a much more interesting seat arrangement.



People arrived at the HCI lounge, and small groups started to form.

Groups gathered for different purposes, people with food in their hands automatically sit around the same table, people who are working on something with their laptop gathered around the same table but working on individual projects.



A different angle of after lunch gathering at the beginning, showing how groups are having small talks over random things.

The TSRB HCI Lounge is a casual, semi-private environment where small groups from the same program gather to discuss personal or academic-related topics, work on group projects, and have meetings. During phase I of the observation, a group of four students, a mix of both international students and domestic students from different cultural backgrounds, gathered to discuss their group projects. Sitting arrangements were telling: students tend to sit with who they share the most similarity culturally, and conversations among this group were mostly task-oriented at the time of observation. A domestic Caucasian male leads the conversation, with one other domestic student giving consistent feedback; an international student and another domestic student of a different cultural background tend to talk less unless the topic or question directly relates to them. Interactions within this group leaned practical rather than socially integrative.

Phase II of the field observation happened after typical lunchtime (12 pm - 2 pm); the lounge atmosphere noticeably shifted as I reentered the space. More students gathered; they were comfortable joining random groups and started chatting with each other over multiple different topics that are light and social, including

personal interests, recent life experiences, academic projects, etc., which created openings for cultural sharing. Students who had previously stayed within their own cultural groups began moving around, joining different clusters, and engaging in casual conversations. Humor and small talk helped ease language barriers, allowing quieter members to join more comfortably. Unlike the earlier session, which was task-driven and structured, this casual setting encouraged more spontaneous cultural mixing. Students appeared to be more relaxed, and interactions felt more intentional across groups.

The lounge environment, paired with the after-lunch timing, played an important role in making space for informal cross-cultural exchange. Relaxing moments are essential for fostering multicultural integration, as they allow people to engage on a personal level and build comfort across differences.

Observation Reflection

Conducting field observations in both the school library and program lounge gave me a direct sense of how students interact in different types of shared spaces and how cultural mixing occurs or doesn't. Being physically present in the same space with my target observation group allowed me to notice subtle behaviors, such as seating patterns and posture within a small group. And the timeline of the changes in spaces occurred; this is something that I've never noticed before, and I consider it a very valuable insight. The lounge represents more of a casual environment where people with certain preset connections (they're all from the same program) gather, highlighting how informal, relaxed settings can encourage natural cross-cultural interactions. People are more likely to approach others and start conversations over non-functional topics. In contrast, the library represents a space where, while students from different backgrounds share the same physical space, their interactions are limited and largely functional.

I also noticed that introverted people, or those less confident in the dominant language, tended to participate more in casual discussions rather than professional academic tasks. Moreover, the different purposes of certain physical spaces and the timing of the day influenced interactions: the lounge's semi-open layout and post-lunch timing of my observation created a natural environment that encouraged students to mingle, whereas the library's study-focused, quiet atmosphere constrained casual engagement. These are some of my key insights that would help generate design opportunities such as planning non-task-driven group activities, rethinking seating arrangements, creating informal social zones, or introducing prompts to facilitate cross-cultural conversations—details that might be overlooked in secondary reviews or 1-on-1 interviews.

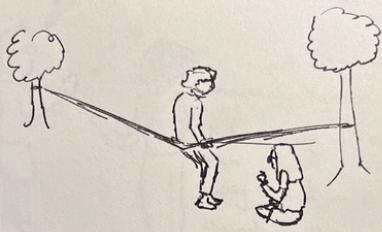
For future observations I would probably practice more systematic observation strategies, such as drawing maps to show seating arrangements and tracking interactions over time (making a timeline) to quantify patterns of engagement.

Steven Yang

Observation 1: Tech Green; Friday, September 12; 3:00 pm - 3:30 pm

Notes

9/12 Observations - Tech Green

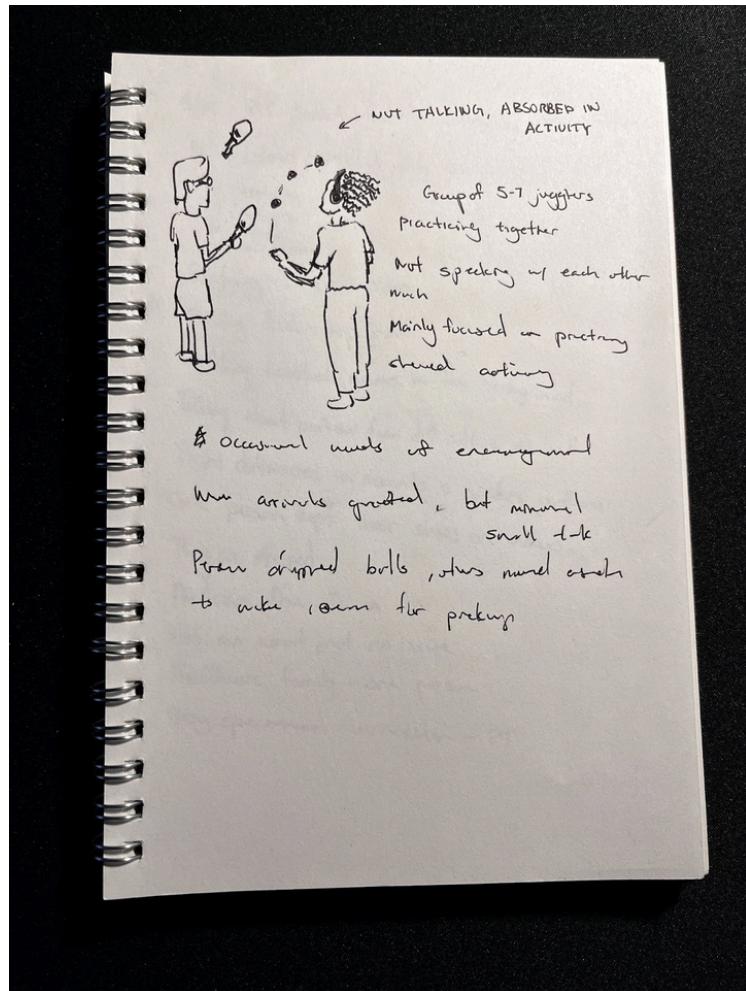


Slack-line : saw people from different backgrounds bonding over shared interest

People standing around to chat, only 1-2 people in slackline at a time bc only one line between 2 Asian girls talking to 1 white Caucasian guy



Two students discuss our assignment
One Black, one ambiguous



Summary

My first observation took place at Tech Green, where I observed students from various cultures and backgrounds mingling in different ways. I noticed three main groups of people interacting with each other:

1. Slackliners

The slackliners were the most interesting group to watch, as their behavior was the least expected. This group was diverse, with a mix of Caucasian and Asian participants. Most people in the slackliner group weren't actually partaking in the activity but were actually primarily engaged in conversation with each other. At one point, I noticed one of the participants using the slackline as a seat while talking to another participant. This example highlights the ability for a shared activity to be a catalyst for connection across cultures, even when the activity is not being performed. I wasn't close enough to know if they were discussing the activity.

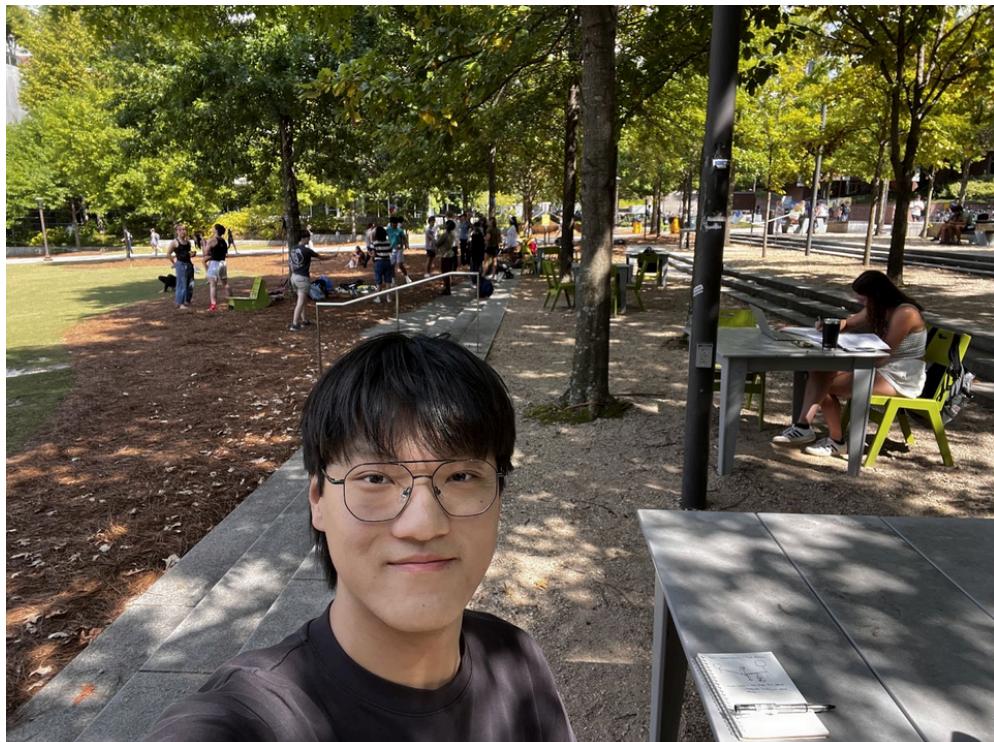
2. Jugglers

The jugglers were a bit more diverse. This group was composed of White, Black, and Asian participants. They also exhibited an entirely different pattern of behavior. The jugglers were mostly focused on the task at hand (juggling) instead of engaging in conversation. While they weren't talking much, they were still very aware of each other's presence. For instance, when one person dropped their balls, the others would alter their behavior to make it easier for that person to pick up their balls. It is important to note that while they

weren't engaging in cross-cultural communication, they were still engaging in cross-cultural connection. The jugglers highlighted the ability for a diverse group of individuals to bond over a shared activity, even in the relative absence of conversation compared to the slackliners.

3. Studying students

The third group was a pair of students who were sitting at a table and working on their laptops. These two students were also from different ethnic backgrounds and appeared to be stressed over the same assignment. Their conversations were limited, but their body language demonstrated that they were comfortable with each other. This example highlights the opportunity for people to connect with those outside of their culture through shared activity, even when that activity is experienced negatively.



Me on Tech Green (slackliners and jugglers in the background, studying students not pictured)

Observation 2: Residential Home; Sunday, September 14; 2:00 pm - 2:30 pm

Notes

9/14 - PT School Students Studying Observations

From different parts of the US

- Georgia
- Oregon
- New Jersey

Studying for an exam

Sharing food - popcorn

Watching football game in the background

Talking about professor from diff culture as well

Slight differences in accents & speaking patterns

One person kept their shoes on indoors

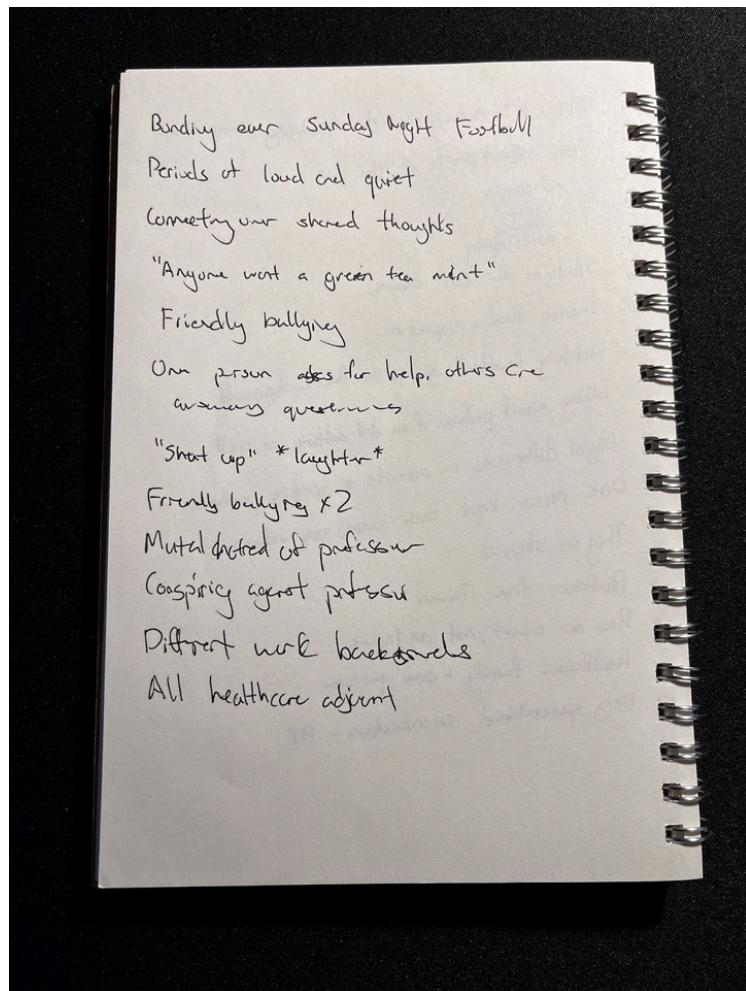
They are stressed

Professor from Taiwan

Has an accent, not an issue

Healthcare family - one person

Very specific - unacculturated - PT



Summary

My second observation took place in a residential home where four students from GSU's Doctor of Physical Therapy program were gathered to study for an upcoming exam. The students all came from different cultural backgrounds: one was from rural Georgia, one from suburban Georgia, one was part Japanese from Oregon, and one was from New Jersey, representing a diverse range of American cultures. As a part of their studying, they solved practice problems from problem sets and studied bone and muscle structures using plastic model bones one participant brought. One of the things the students connected over was a shared interest in football. As a result, a live football game was played in the background, and the students worked together to connect to an ESPN account to watch it. At one point, a student who cared a bit more about the football game sat away from the rest of the group to work individually while being able to observe the game for a short duration of time. Even though they sat apart, they did not appear to be socially ostracized in any capacity. While they watched, they also shared a bowl of popcorn.

The students also connected over sharing opinions about one of their professors, who was from Taiwan. They reported cultural differences about him being particularly open and eager to share photos of his children as well as his speaking with an accent, although he was described as very understandable despite it, indicating that the accent had no impact on the learning experience. One of the students engaged in "playful bullying," where she poked fun at another member of the group. The humor was both well intentioned

and well received. Surprisingly, the source of the teasing subverted my expectations; it came from the student from suburban Georgia, where I would've expected that kind of humor from the student from New Jersey. Ultimately, this group both reinforced existing insights from my previous observation and generated new adjacent ones. First, cross-cultural connections can be facilitated or reinforced by shared activity (studying). Second, cross-cultural connections can be enabled by shared opinions (difficulty of coursework). Third, cross-cultural connections can be enhanced by shared interests (football). Fourth, cross-cultural connections can happen despite barriers in language and customs (accent, sharing photos of his kids). Fifth, cross-cultural connections can be enhanced through shared humor (teasing). Sixth, cross-cultural connections can be enhanced through food (popcorn).



The four students studying together



The football game played in the background

Observation Reflection

Overall, I was surprised by how insightful the observations were. In the context of our particular project, I found that observations were most useful for providing us with two main things: First, it helped us explore how people of different cultural backgrounds interact in real life in different contexts and scenarios. Second, it gave us an opportunity to observe them in a natural state, where the presence of the observer had little or lesser impact on their actions as compared to, say, a contextual inquiry or interview. In an observation, the subjects are less cognizant of my presence, and as a result, they will act much more like how they would in an unobserved state. As a design method, observations led me to better understand the nuances of how people interact with those outside of their culture. I noticed things I didn't expect, such as bonding without communicating over shared activities. These insights helped shape our design direction with more granularity. Next time, I would want to put more thought into the spaces I observed before just showing up and plopping myself down. I feel that I got pretty lucky to see the groups that I did, but that isn't always a guarantee. I also wish I had taken note of more specific people, interactions, and sensory details.

Interviews

Interview Questions

Intro & Warm Up:

Introduce yourself, take consent, tell them no right/wrong answers, just wanting to understand your experiences

- What are some things you like to do in your free time?

- Who do you usually spend time with on a day-to-day basis?
- Are there people you wish you got to know better or spent more time with?
- How do you usually choose who to spend time with?

Experiences:

- Can you recall a recent experience where you met a new group of people you didn't know well? What was it like? How did you feel?
- Are there situations where you interact with people outside of your usual background, and when does this happen? How do you usually feel in these situations?
- How often do you connect with people outside of your culture or from a different background?
- Can you tell me about a time when you made a connection with someone from a different background than you? How was that experience?
 - What motivated you to engage with this person/group?
- Can you describe a memorable experience where you learned something new from someone from a different background?

Motivations & Needs:

- What would motivate you to join an event or group with people from different backgrounds?
- How do you benefit personally from connecting with people who are different from you?

Conversations:

- What do you usually talk about?
- How do you decide what to talk about when interacting with people from other backgrounds?
- Are there topics you usually talk about — or avoid talking about — when you meet someone from a different culture?
- Are there things about connecting with new cultures/different backgrounds that you like? Dislikes? Make it easy? Hard?

Barriers & Challenges:

- Do you notice any divides among different student groups? How do they affect you?
- Does it feel difficult to connect with students from other cultural groups?
- Have you ever felt excluded or hesitant to join in because of cultural differences?
- Are there moments or places where it feels harder to reach out to someone from a different background?
- What do you wish could change about how students mix socially on campus?

Social Events:

- Are there shared activities, events, or hobbies that help make cross-cultural conversations easier?

- Have you ever participated in a program or event that tried to encourage social mixing? What worked or didn't work?

Social Ideas:

- If you could make it easier for people to meet others from different backgrounds, what would help?
- If you could design your ideal activity or space to connect with students from different cultures, what would it look like?

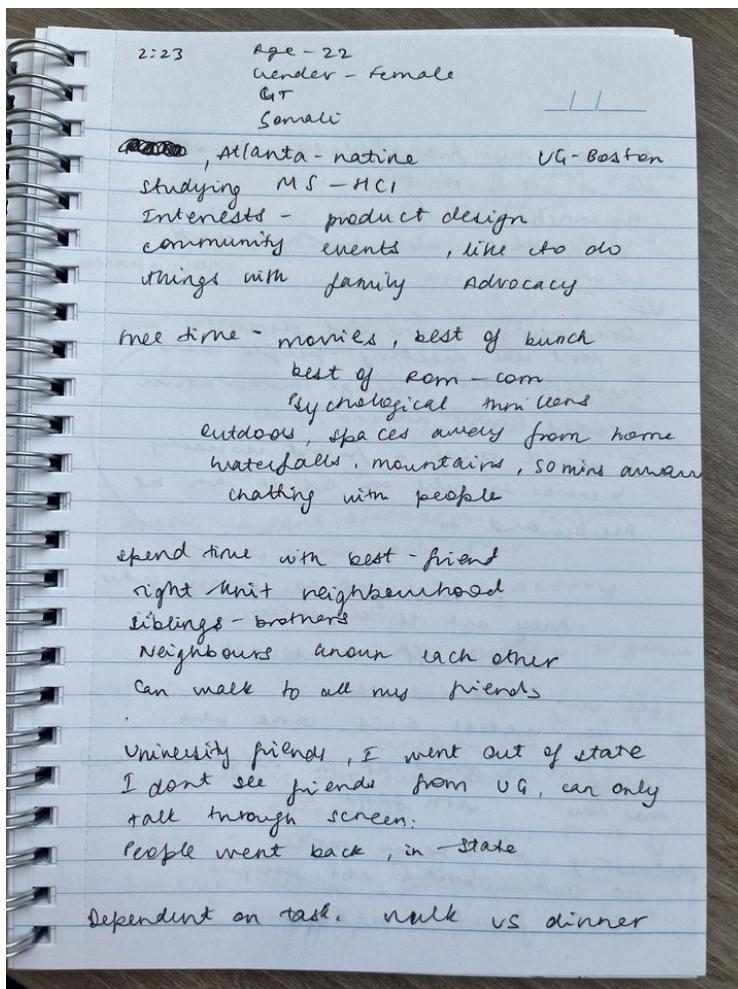
Reflection & Closing:

- What advice would you give to someone trying to make connections across cultural groups?
- MAKE SURE TO THANK FOR TIME
- COLLECT DEMOGRAPHIC DATA

Medhavi Sabherwal

Interview 1

Notes



11
I know my friends' interests so I do it acc to that

Brunch with friends
outdoors with brother, sports
movie parties

exp:

Orientation.. no one used slack
I dont like meeting people online
Acquaintances through orientation
I didnt know anyone.

I would bring a friend usually
↳ easier to rely on as it can be awkward to .

I cant get to know who they are as a person
comes off intentionally

See our vibes in real.
non-verbal cues, cant pick

college. I grew up in neighbourhood
was new with same bg.

I interesting, got to learn more
no assumptions abt people
Senior, found I had new.

learning new things.

feel - curious, aware, I don't wanna
come off as disrespectful

people's communities knowledge,
how was it like growing up.

How often - so used to people ^{I know} here, more comfortable

Boston - more men, weekly

clubs - Italian, ^{as basis} Cuban

Nigerian situation.

somali student association - reopardy

to get to know each other

other clubs open to teaching,
answer questions.

Food is a big part of culture. Nigerian

Jollof rice - tomato-based - friend said
^{it's great} carefree environment.

People talking about their experiences with
^{food} Burkaabur

Dance - ~~each~~ - women do it

teaching session, people are hesitant
but diverse people, open to try & do
it.

main to school, passing courses
people ask abt hijab
curiosity .. I like seeing scarf
explain it. People come to assumption
do you not come from place where
where they dont Muslim
Modesty is different.

motivation - I have a hard time
upsing a thing
academic - easier, will think
I don't know how they will
Benefit people in head
I'm hesitant respond
↓
diversify, learn so much more.

courses - shared aspects - major, food
Oh all you African, Somali
name, Nigerian? Then I started asking
I wonder where they're from
respectful, don't avoid, not too personal.

divides, people stick in their communities
ethnicity, race, new in colleges
but real world is more.

people
look like them, values similar → easier,
comfort.

subconsciously, people who might not
look like me maybe I won't fit in,
hesitant.
if I don't fit in

High school - cliques, obvious when
you don't fit in
difference in way you
grew up.

change - class like now, groups with
people we don't know
maybe I stuck with ppl
I would just be with.
clubs are voluntary
shuffle up clubs.

Ideas - Be in bigger group of people
I wanna learn abt diff people
casual - restaurant
focus isn't just
+ talking.

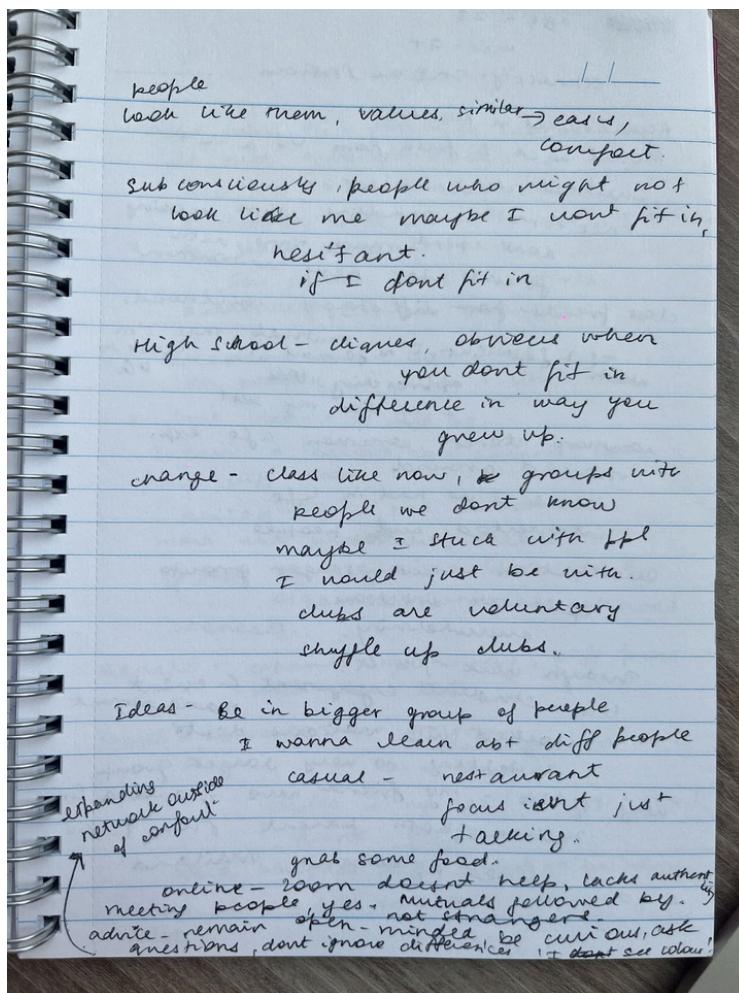
expanding
network outside
of comfort

grab some food.

online - zoom doesn't help, lacks authent.
meeting people yes. naturally followed by.

advise - remain open - not strangers

questions, don't ignore differences, be curious, ask
+ don't see what!



Summary

I interviewed a 24-year-old female Somali student pursuing an MS in HCI. The interview was conducted offline in a classroom for 30 minutes. The participant grew up in Atlanta but spent her undergraduate years in Boston, where she was exposed to more diverse cultural environments. She describes herself as community-oriented. Her day-to-day interactions are mostly with her family and neighbors, whom she has known for years.

3 Key Findings:

1. In her undergraduate college, she regularly met and interacted with people from different cultures, particularly through student clubs such as the Somali Student Association, Nigerian Student Association, Italian Club, etc. These gave her hands-on exposure to different traditions, foods, and activities (like making Jollof rice or learning the Somali dance "Burambur"), which helped her become more open and well-rounded.

"I went to a bunch of different clubs because my friends were diverse. I would go to the Italian Club, the Nigerian Student Association. It was always fun, and it would be a good way for me to learn about their culture. People were just so open to teaching me. It always felt like a space that you felt appreciated in. In one of the Nigerian student association meetings, we made Jollof rice, and that was my first time. It was a carefree environment where I didn't have to make it perfect or anything."

2. She expressed a preference for in-person over online interactions, as she felt online interactions lack authenticity and non-verbal cues are an important part of forming genuine connections.

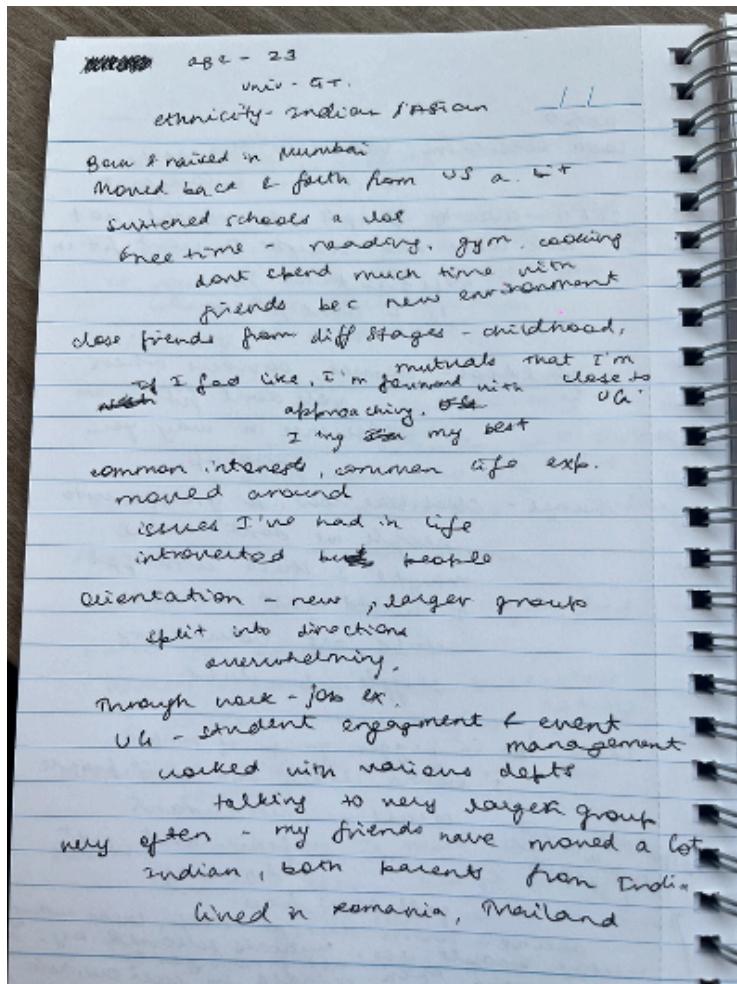
"I think that I can't get to know who they are as a person online because when texting, people have a lot of time to think about the things that they want to say, so everything comes off really intentional. I pick up on nonverbal cues and how people show themselves, which I'm not able to pick up online."

3. She recognized both the benefits and challenges of cross-cultural mixing. She values curiosity and open-mindedness. However, she felt that people often form groups based on comfort zones, ethnicity, or shared backgrounds, and she feels hesitant to approach groups she feels she "doesn't fit into" culturally.

"I think people definitely stick together in their own communities, or what they're comfortable with. Like, we're connected by ethnicity or race. I do understand like people want to just have some level of comfort because it's easy. I think that sometimes subconsciously I'll feel that way if I see a group of people who I may not necessarily look like I might fit in, which is kind of a bad thing to think about, but it's like, I don't actively do it to take that extra step to kind of get into a space that I don't fit in culturally."

Interview 2

Notes



II

Friend from UG - American, caucasian
we met through work.

New Mexico. moved around
state - her parents live in Colorado
she lives in Baltimore

She spent time in Africa.
relatively similar interests

comedian & we both liked
co-worker we didn't like

I don't view it as diff bg.

I have a unique bg - parents come
from diff state.

Raised by a 2nd person
more abt personality match
if they have qualities like, type A:
organized, animals, shared
interests.

Benefit - expands my thinking, diff per
well-rounded.

comes - orientation - to grown challenges, to do list
as a student

topics in my age / family - food,
drink, f1 formula.

Avoid personal stuff, I tend to be introverted
dislike - if they feel only one culture/bg is
valid.

~~Barriers~~. likes.

I have struggled to talk within my own
bg so more options is good
now I'm more comfortable.

• ~~Divides~~ ppl tend to speak to ppl from
their own geographical
same country, same regional

same state
UG - diverse covid, East-Asian. I was
only person in India
North American - more open
East Asian - preferred exclusive
to each other.

* tried to approach but they're not
Conf & graphic design - share
your work. East Asian did not comment
hesitant to ~~say~~ say out loud.

organic - provide space & environment

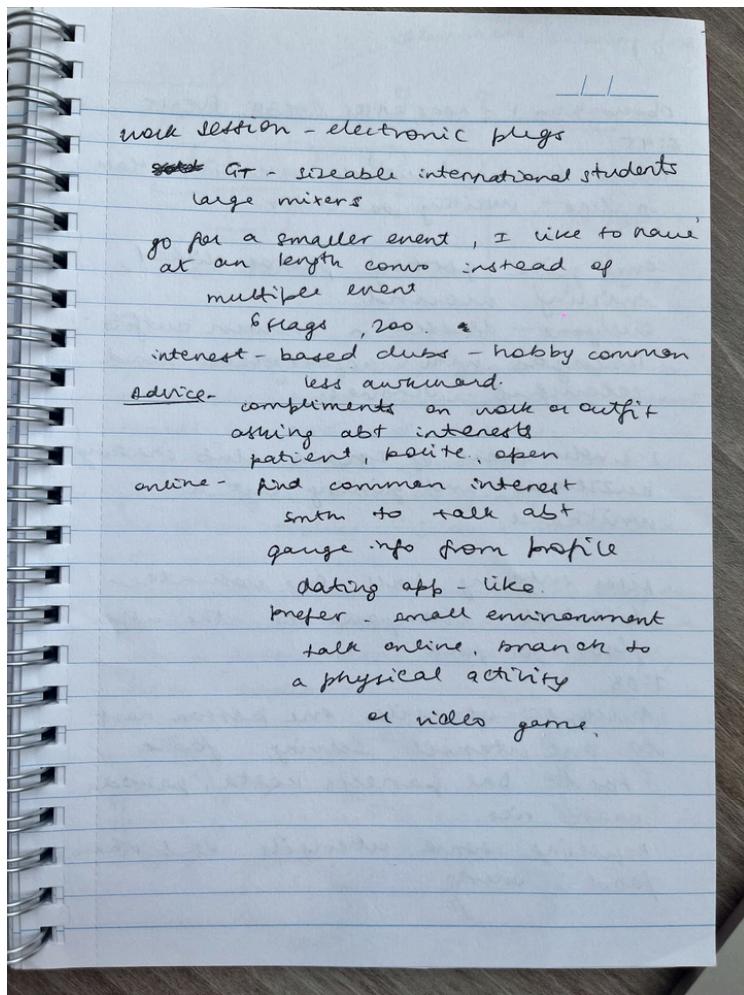
Non-academic activities - several clubs
but directed towards UG.

Movie nights

Gym, random causes helping with
equipment.

~~Offer~~ free food & drinks, range of events

Party DJ



Summary

I interviewed a 23-year-old female student in the MS-HCI program. The interview was conducted online on Microsoft Teams for 30 mins. The participant is originally from India—born and raised in Mumbai, India—but has moved between the USA and India multiple times. She did her undergraduate degree in the USA. She described herself as introverted but proactive in making friendships and new connections with people who share common interests, life experiences, and similar personalities rather than only seeing cultural backgrounds.

3 Key Findings:

1. The participant observed that people often form groups based on geographical or cultural familiarity, gravitating towards others from the same country or state or ethnic background, which unintentionally limits cross-cultural interaction.

"People prefer to speak to people from their own geographical background. In my undergrad, my first year was online because of COVID. And a majority of the students were East Asian. I was the only person from India. A lot of the East Asian students preferred to speak exclusively to each other."

2. She highlighted the value of smaller, interest-based events such as gym meetups or quiet study sessions as better environments for meaningful conversations compared to large mixers, which feel superficial.

Personality matches and common hobbies (gym, gaming, cooking) were stronger drivers of connection than cultural background. People felt more at ease starting conversations when there was an obvious shared interest to talk about. The interviewee's most successful event in undergrad was a small work/study session with snacks.

"Larger mixers don't really allow you to get into conversation much, as it is something more surface level. I would personally say go for a smaller event because for me, when I make connections with people, I like to have a conversation at length versus jumping between 10 or so people. Another good way could be like interest-based clubs."

3. Personality and shared interests are stronger drivers of connection than cultural background, and approaching new people with patience, compliments, and open-mindedness helps bridge differences. Cross-cultural connections are smoother when both parties are open to different viewpoints. She disliked it when someone treated their culture as the "only valid" perspective.

"If I'm speaking to someone who takes an approach or is of the opinion that only their culture or their background is correct and valid and that other perspectives or options cannot exist. That is a little bit frustrating. Both parties should be open-minded and patient and open to getting to know things."

Interview Reflection

The interviews allowed me to understand my target users better as they shared their lived experiences, motivations, barriers, and frustrations. Both participants expressed how they feel in social and cultural spaces. For example, the Somali student emphasized how student clubs in her undergraduate years exposed her to new foods, traditions, and dances, which made her feel welcomed by other cultures. The Indian student highlighted the role of interest-based activities—like small study sessions or gym meetups—to form genuine connections.

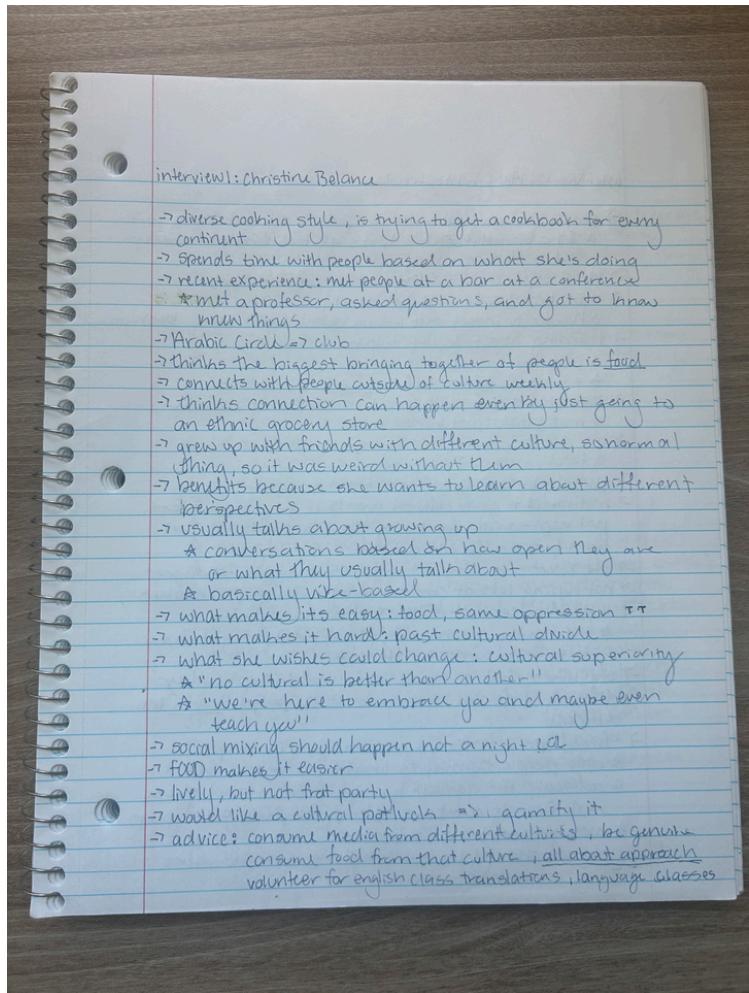
I learned that while both participants value cross-cultural interactions, they also experience barriers. The Somali student admitted feeling hesitant to approach groups where she feels she might not "fit in," and the Indian student felt that people often self-segregate into familiar cultural groups. These insights surprised me because even though they were proactive about community events, they felt hesitant in unfamiliar spaces—something that was not visible in my observations of events like Garba Night or Tech Green. These insights expressed social anxiety, which is difficult to study from secondary research or observations, as it's an account of a person's lived experiences.

If I were to conduct interviews again, I would incorporate more probing questions about what specific interventions would make participants feel more confident when interacting with new people in new spaces. I would also like to interview people who actively avoid cross-cultural events to understand their motivations, helping me design for inclusivity.

Olufunmilola Obielodan

Interview 1

Notes



Summary

My first interviewee was a 22-year-old Black Haitian woman who is currently pursuing her master's degree in Chicago. We have been friends since high school and also attended the same undergraduate institution. The interview was conducted over the phone and lasted about an hour.

From this conversation, I identified three key findings:

1. Food is an important way to connect with culture.

She spoke a lot about food, stating that she often participates in food-related activities such as cooking cultural dishes and visiting ethnic markets. One of her goals is to get a cookbook with recipes from every continent. She believes that food plays a central role in bringing people together and creating bonds across cultures, mentioning "food as the biggest thing that brings people together" several times. Even when offering advice to others who want to connect with different cultures, she recommended starting with food, since it is both accessible and meaningful.

2. Sharing culture should be seen as a learning experience, not something stigmatized.

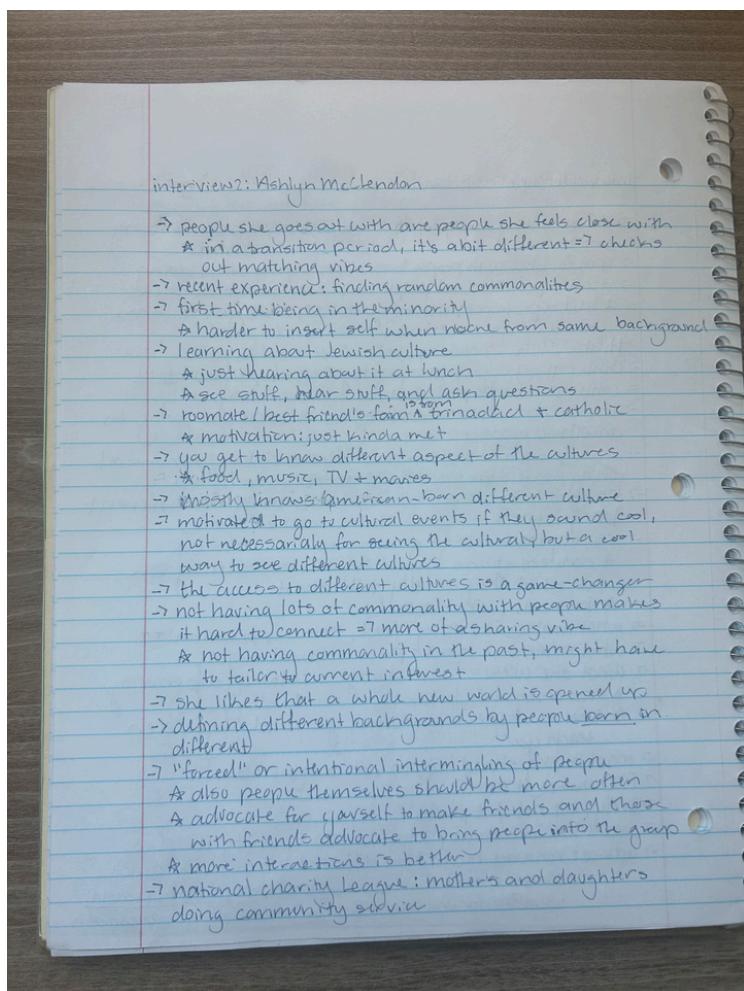
She stressed that no culture is superior to another and that embracing social mixing helps people grow. She recalled how, during her time in undergrad, some cultural groups had an attitude of superiority over others. In her point of view, this made it harder for people to engage across cultures, leaving some feeling excluded. She also spoke about cultural differences within the same ethnic group. For example, she is Haitian; however, her experience as someone born and raised in the United States differs from Haitians born and raised in Haiti. She expressed a desire for cultural groups to adopt a more welcoming, “we are here to embrace...and teach you,” mindset both to outsiders and to those within the community who may not be as familiar with their heritage.

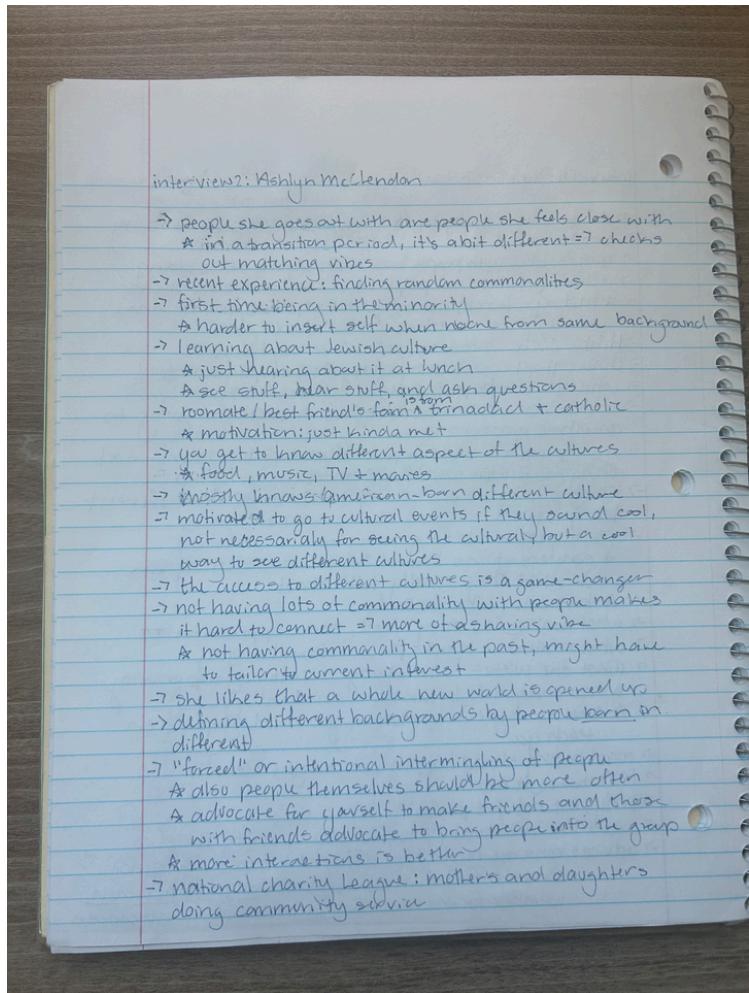
3. Events are valuable for fostering connections.

She highlighted the importance of events and clubs in helping her connect with people outside her own culture, stating that she herself attends Arabic Circle, an Arabic-speaking club. In fact, she attends multiple clubs and activities and tries to engage with a different culture weekly. These spaces provide opportunities to learn from different perspectives and connect to different aspects of the culture. She suggested that cultural events, such as potlucks with games and music, could be particularly effective in encouraging meaningful cross-cultural exchange.

Interview 2

Notes





Summary

My second interviewee was a 22-year-old White American woman who is currently pursuing her MS HCI at Georgia Tech. We are classmates, currently in the same program. The interview was conducted over FaceTime and lasted about an hour.

From this conversation, I identified three key findings:

1. Commonality and familiarity are powerful drivers of connection.

My interviewee emphasized the importance of having things in common when forming relationships. She explained that when people lack shared experiences or interests, it can feel difficult to connect. In those cases, interactions often feel more like “sharing space” rather than building a genuine bond.

2. Intentional intermingling makes connection easier.

She noted that being placed in situations where people are encouraged, or even required, to mingle, such as during lectures and group activities, helped her build stronger connections with classmates. These structured settings prevented her from only sticking to familiar groups and opened the door to new relationships. She also stressed the importance of taking initiative, encouraging others to “jump on every

opportunity to get to know people” and to advocate for themselves in making friends. In her words, “more interactions is better.”

3. Exposure to different cultures transforms understanding.

She reflected on how growing up surrounded mostly by people similar to her limited her awareness of other cultures. Without exposure, she found it easy to remain unaware of certain cultural perspectives or experiences. She emphasized that directly knowing people from different cultural backgrounds is crucial, since true understanding is hard to achieve otherwise.

Interview Reflection

Conducting interviews gave me the opportunity to better understand people’s thoughts and feelings in ways that observation cannot. Observations provide valuable context, but interviews reveal the personal experiences, emotions, and motivations that shape those contexts. This process also helped me challenge and refine my own knowledge and assumptions from literature review and my broader understanding of how and why people connect with others. For example, one interviewee explained that her strong desire to connect with different cultures stemmed from growing up in a diverse community, something she only realized after moving away to college. In contrast, another interviewee engaged with cultural events more casually, joining when it sounded interesting rather than seeking them out intentionally. Both interact across cultures regularly, but with very different motivations.

Reflecting on the process, I think I would try to do in-person interviews. These would give me access to body language and silent cues that I could otherwise miss over the phone. I would also make a more deliberate effort to record my immediate thoughts and connections during the interviews rather than only reflecting afterward. Capturing those initial and in-the-moment reactions could provide meaningful insights that complement earlier and later analysis.

Sizhe Luo

Interview 1

Thursday, September 11; 1:30 pm - 2:30 pm; HCI Lounge

Notes

Baltimore,
2nd gen immigrant.

- what, painting, spending time w/
friend (indoor/outdoor)

- relax, vs. board.

- things you do everyday?

- TSRB spend a lot of time
together. with team.

- check project progress

- kennell, johnny, cathy

- getting along, pretty well.

- different characteristic.

- Cathy - Chinese

Johnny - Vietnamese

Kennell, Phillipino

- At the beginning, how was it?

① make sure understand each other

- tip-toe around each other.

④ 相互补足。

topic change through time? (After getting closer)

- relationships
- events we wanna go?
- building a stronger connection

All children of immigrants.

work ethic. (Shared)

diff cultural bg does effect group work. Share what it's like in more country.

Appreciation for 1st gen immigrants (Nigerian)

- Pressure from that?

- With non-immigrants?

- Don't really mention this topic. of immigration bg.

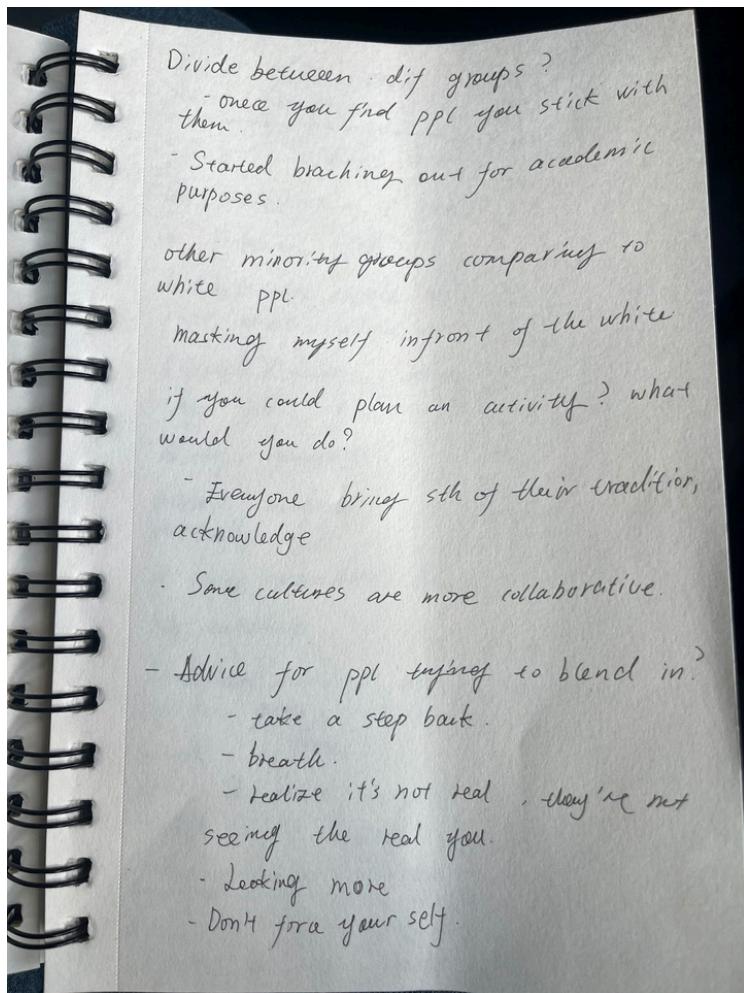
- What if they ask you?

- feel self conscious, be more careful with things you say. Why they're asking?

ppl ⁼ feel way more comfortable with ppl who has same exp.

- blending in with other ppl.
 - I'm never ashamed with identity.
 - Didn't wanna bring anything cultural to school lunch (trying to blend in want to be accepted).
- protecting myself.
 - After seeing what hap w other Nigerian kids.
 - Social events to blend in?
 - School weekend events, ~~best~~ mom to go, try hard to attend. want ppl to attend.
 - felt social necessity to show up. even not enjoying that much.
 - Did feel lonely bcs sometimes not understand their topics.
 - Approach the nicer ppl. but still cultural distance.
 - Try to get closer to similar social bg ppl.
 - Hard to approach ppl with diff bg, now ppl?
 - Negative group stereotype. Judge myself.
 - Don't want rejection.

- Different cultural bg by being racist.
- Observations on others trying to blend in.
 - Boys are ~~way~~ more aggressive and outward. ~~for~~ violence racist.
 - ppl rather take humiliation than being left alone.
- for me, I'd back up and try to exist.
- Is there anything you'd do to drawing similarity.
 - highlighting minority groups
 - having a greater intention to display culture. always have an open mind.
- Events that made mix easier?
 - Dances, Potluck.
- Ever participated?
 - yes. dressing up in cultural attire. cultural dishes.



Summary

The interview was with a 22-year-old Nigerian woman, a first-year grad student, and a second-generation immigrant who grew up in a majority-white community.

The interviewee is currently grouped with other second-generation immigrants but with different cultural backgrounds; for her group project, she likes how things are going so far. The reason being, they are children of immigrants, and they share similar values and mindsets. For example, the interviewee mentioned how they have the same work ethic, which people of non-immigrant backgrounds might not have. The interviewee used herself as an example, saying that because she recognizes how hard her parents—the first-generation immigrants—had to work to put their children where they are today, she always made sure that she worked as hard as possible as a way to repay her hardworking parents.

The interviewee mentioned that at the beginning of the semester when her group met each other for the first time, they tiptoed around each other, trying not to say anything triggering. As time went by, through meetings and group discussions, they learned what each other was comfortable and uncomfortable with, and their relationship got closer. This indicates that continuous, genuine communication plays an important role in encouraging cultural mixing.

The interviewee's answer also reveals several barriers to organic cultural mixing:

Lack of Shared Context: Growing up in a majority-white community, the interviewee felt an invisible barrier and a need to mask herself in front of people from the mainstream cultural background. Her social interactions with people from the mainstream cultural background were driven by obligation, not genuine connection. This suggests that when one group is dominant, individuals from minority groups may perceive social interaction as laborious or performative, which actively discourages authentic mixing.

Fear and Self-Protection: The interviewee's middle school experience witnessing and fearing racism led her to actively try to fit in the dominating culture as a self-protective measure. The interviewee also mentioned a visible, obvious divide between different cultural groups at school; especially during lunchtime, most people always sit within their own cultural group and remain unchanged. This was a reality she felt powerless to address, fearing she would become a target if she said or did something about it. This fear is a major deterrent; individuals, especially minors who feel powerless, will prioritize safety and self-preservation over attempts at cultural mixing.

Group Division as a Default: The interviewee's observation that a divide exists, coupled with the reluctance to challenge it, indicates that group segregation can sometimes become the social default, which directly leads to a design opportunity: the need for requiring an intentional intervention to overcome it for encouraging cultural mixing between different groups. Her experience underscores that cultural mixing is not simply about physical proximity but requires psychological safety and continuously shared context.

Interview 2

Friday, September 12; 4:30 pm - 5:30 pm; HCI lounge

Notes

A Drew

Born York Pen South
Suburban neighborhood.
public high school.

Seattle Washington, worked in
a coffee shop. (Brista) 4pm-12am.
had board game w college students
& SWEs (Ames)

- Best friend Jordan, from
South Korea, adopted.
Rochester U. predominantly white.
"Non-American bg."
not diverse friend group.
life long friends.
- proximity.
- feel comfy around different cultural
bg.
- Additional barriers.
- Wish spent more time with:
 - in high school well connected.
 - language barrier. (Wish spoke more languages)

Needice that he was exposed to his family tradition, things he considered foundational.

He was vocal.

Whoever it is you have sth to learn from.

especially ppl who you spend time with.

why they act the way they are now.

Realization of my own bg crave different bg &

Motivation

1. Focus of the event. mix of culture to help you embeded.
(for example → museum)

Would hesitate to go to a Chinese New year party - feel like invading their space.

- target audience. (Are you?)
Wanting to be supportive.

do wish to itemize
care

experience :

1. Being able to see the diversity
growing up was really exciting.

Approach reserved with different
cultural bg.

Awareness of being privileged
digest instead of processing
try to be respectful & non-ignorant.

2. Volunteer manage an UTA (60+vol)
cultural exposure. diversee
Age in

3. do it intentionally - going to
different markets, different public
settings. feel Japs < Launer
★ music & cultures - Michelle ~~the world~~
darby activities

4. my last supervisor. (black,
grew up in Mississippi (the hood)
Soather Christian family.

Another level of vulnerability when mixing culture.

time (challenge) not spending enough time together.

Barriers :

1. even groups are good about mixing unintentionally sit Segregated,
- reinforce : potential nervous.
no matter how good a group is
2. choose to sit if space allows. —
get to know ppl individually

Social :

1. running walking. outdoor museums. concerts. dining.
book
2. yes . UGTT volunteer.
Served on the board on a running programme.
- Survey understand ppl ~~or~~

2. helps with worldview
different perspective.
running (dif culture have dif
methods)

Conversations:

1. Name, basic bg.

Safe questions: geographical.
("it's easy to make assumptions")

action related & instead of how
someone grow up.

2. listening what ppl say or not
say, being context aware.

Consuming media from dif bg.
past experience.

hear about other ppls exp.

3. different food & drinks.
Music, fun experiencing
even if it isn't good at first, but
worth trying.

difficult: don't wanna look like a fool
being foolish, being embarrassed

Social:

1. be intentional about recruitment make sure photos show diff bg. promotional material.

educate ppl on why diff's good.
value is → diverse cultural & push ppl back if not.

Leader must be skilled at it.
equal opportunity

Summary

The interviewee was a 23-year-old Caucasian male, a first-year grad student, who grew up in a suburban neighborhood of a small town in Pennsylvania. This interview started with a brief walk-through of the interviewee's past experience. He started in a small southern town and worked as a barista in Seattle, where he was exposed to a more diverse culture and group, since the coffee shop he was working at was open until late at night, hosting board games that attracted many college students from different cultural backgrounds. Then came to Atlanta, Georgia, to attend school.

The interviewee outlined a specific approach he uses when forming connections with new people from different cultural backgrounds.

1. **Caution and Listening:** He suggests that at the beginning of a new connection with someone of a different cultural background, he tends to talk less and listen more.
2. **Focus on Action-Based Topics:** He prefers to discuss action-based topics rather than digging into the person's past.

By practicing the strategies mentioned above, the interviewee can gather more information and better avoid triggering topics when communicating with people of different cultural backgrounds.

The interviewee once volunteered at another college to help organize a school event; the target audience of that event was a different cultural group. Despite the event being open to all, he was "self-conscious enough not to attend," indicating a tension between his strong will to be supportive of different cultural groups and his discomfort with inserting himself into a space that is not primarily intended for his group.

The interviewee emphasizes his appreciation for learning new things and gaining new perspectives from different cultures. He specifically identifies music as a very important medium for cultural exchange, along with mixed cultural museums and running as an efficient activity for cultural mixing since different cultures have a variety of understandings and practices for this activity.

In conclusion, the interviewee is actively working to connect with diverse groups, using respectful, structured methods, and identifying shared activities as effective bridges, even while grappling with the boundaries of his own privilege.

Interview Reflection

The interview sessions definitely have a different flavor compared to the field observation since the interviews are specifically about 1-on-1 conversation, which provides me with an opportunity to give undivided attention to one individual. I was able to sit down with my interviewees face-to-face and have some quality time while finishing my interviews. Although our team came up with a list of interview questions, I find myself most comfortable practicing the semi-structured interview method, where I can improvise and make my questions flow naturally as the conversation goes. However, reflecting on my notes after the interview is complete, I do realize that this method could make comparative analysis harder, and I might have missed some questions in the written list.

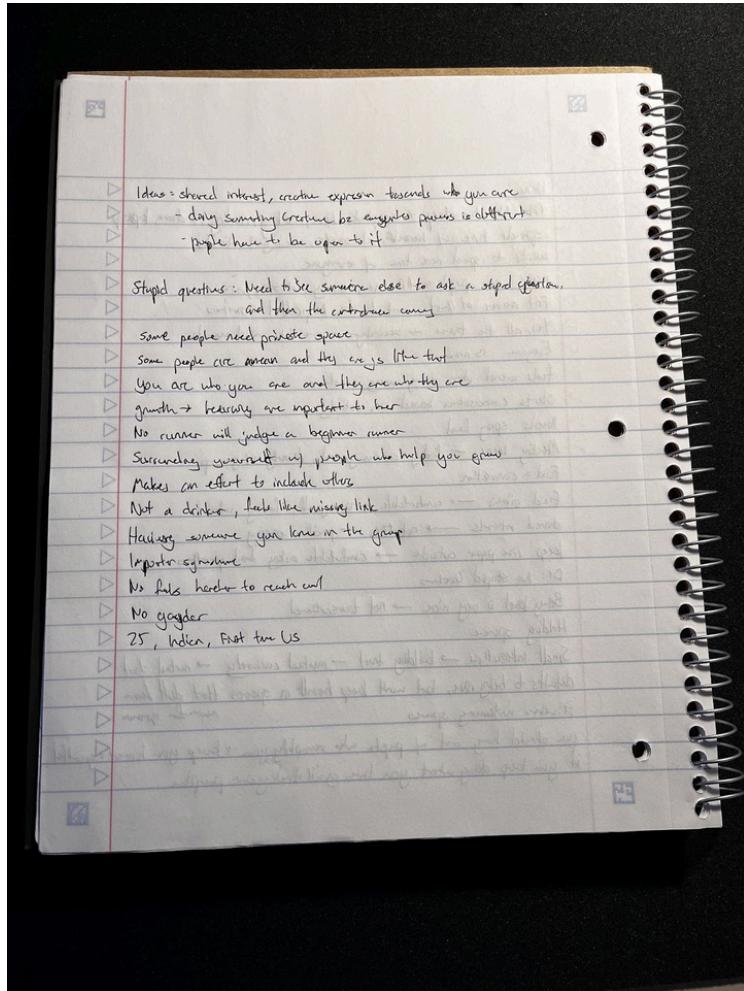
In future interviews, I will intentionally focus more on the emotions and psychological reflections people experience during moments of cultural mixing—specifically asking about feelings of safety, vulnerability, and reward—to better understand the internal friction points that must be reduced for authentic cultural mixing to thrive. And also, I would try to take more notes about the interviewee's body language and facial expression, since these are one of the most significant advantages of in-person interviews that really differentiate this research method from others.

Steven Yang

Interview 1

Notes

- ▷ Neha
 - ▷ feels likes to sleep & scrapbook, clean, cooking, reading, k-tunes, kpop
 - ▷ spends time w/ herself, classmates, new girl friends
 - ▷ wants to spend more time w/ everyone
 - ▷ meeting new people in TL, new, exotic, interesting person
 - ▷ Felt nervous at first, want to be respectful +绅士
 - ▷ Yes all the time — secondyearers are like wild animals
 - ▷ Everyone is nice
 - ▷ feels weird when asking many questions
 - ▷ Starts conversations based on activity
 - ▷ Needs spray hand
 - ▷ Meeting break — finding common ground, diversity of group
 - ▷ Food = connection
 - ▷ Good vibes → comfortable being myself, feeling safe
 - ▷ shared interests → activities → positive energy
 - ▷ keep rice paper outside → comfortable asking dumb questions
 - ▷ DI: No stupid questions
 - ▷ Being kind & very nice → not transactional
 - ▷ Holding space
 - ▷ Small interactions → building trust → mutual curiosity → mutual trust
 - ▷ Defaults to being nice, but won't keep honest in spaces that don't have room for open space
 - ▷ Provides welcoming spaces
 - ▷ You should hang out w/ people who complete you + keep your heart & grateful if you keep doing what you love, you'll find your people



Summary

25F, Indian, current master's student, lives in Atlanta, GA (Subject N)

Subject N is a first-year master's student from India, and this is her first time living in the United States. Her outlook on cross-cultural connection is positive. In her interview, the following key insights emerged:

1. Shared Interests and Expression

Subject N feels strongly that shared interests and creative expression can be a solid foundation for cross-cultural connection. Subject N noted that food was a particularly useful tool for engaging connection and sharing cultures. She also learns new things from people outside of her culture, noting that a friend had taught her that rice paper was meant to be kept outside of the fridge. She also builds connections based on hobbies and interests, noting her interest in K-pop and K-dramas.

2. Comfort, Trust, and Belonging

Another point that Subject N stressed was the importance of being able to ask “stupid” questions in a group of new and unfamiliar people, i.e. questions about others’ culture. She strongly values building a feeling of comfort and trust with new people where she won’t feel judged if she asks questions. Subject N noted that

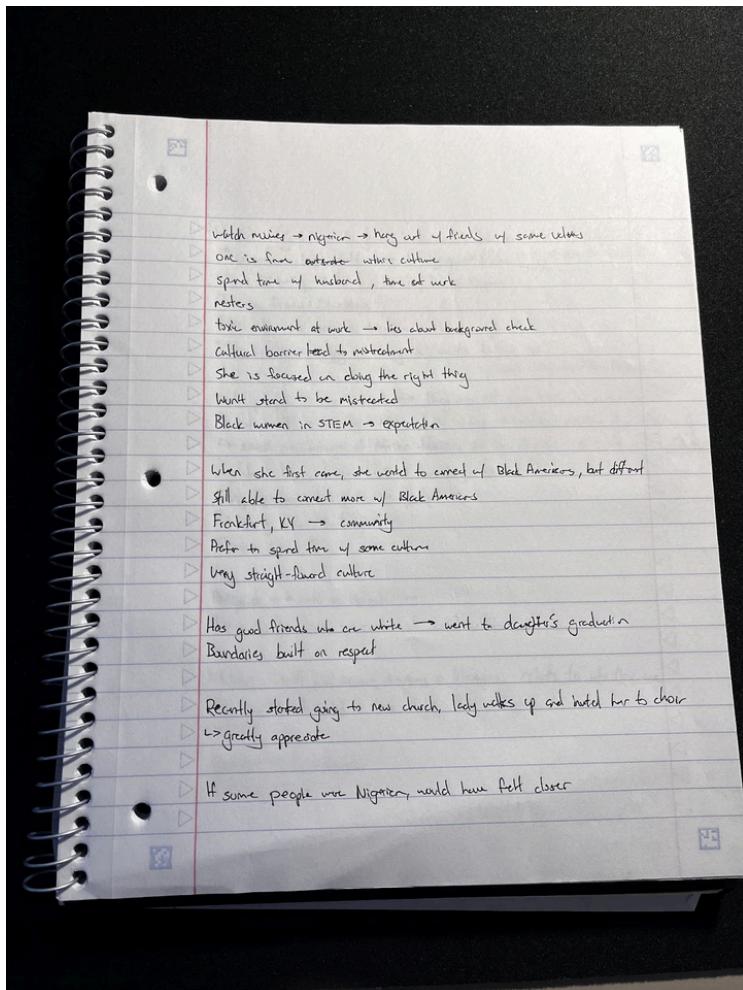
small interactions were key to building trust. N also emphasized the importance of authenticity in building new relationships.

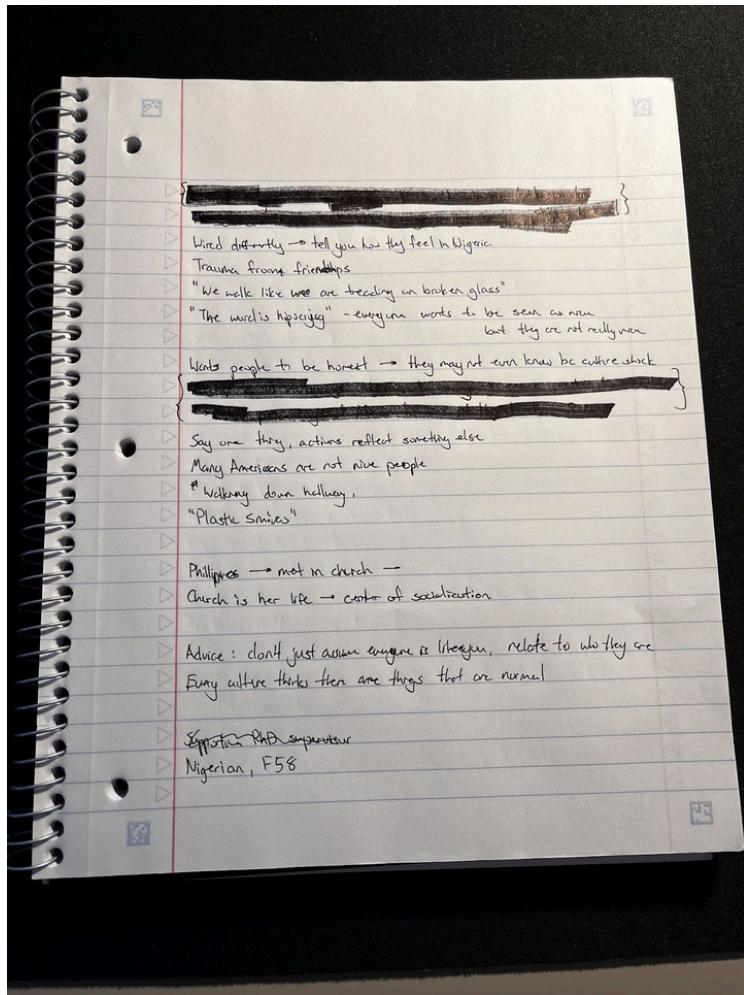
3. Barriers and Challenges

N also noted several barriers to successful cross-cultural connections. Because she doesn't drink, N finds it uncomfortable to be in some social dynamics centered around alcohol. She also finds that situations where she feels uninvited or left out pose a major barrier to cross-cultural connection.

Interview 2

Notes





Summary

58F, Nigerian, moved to the US in 2001, lives in Frankfort, KY (Subject O)

Subject O is a 58-year-old woman from Nigeria. She has spent the last 24 years living in the United States. Unlike N, O's outlook on cross-cultural connection is much more pessimistic. In her interview, the following key insights emerged:

1. Connection with others over shared values

Subject O stressed the importance of shared values. As a Nigerian, she strongly values being able to have a certain kind of openness in friendships. "I can just go to their house whenever." O laments not having this kind of openness with her non-Nigerian friends. She does, however, have several close friendships outside of her culture—one of which being White American and one being Filipino. She notes that she can have that same kind of openness with her Filipino friend.

2. Negative experiences stemming from cultural differences

O strongly lamented her toxic workplace, and she notes that cultural differences play a major role in her negative experience. In Nigerian culture, everyone is very honest with each other about thoughts and

opinions. "If we don't like you, we will let you know." This was an adjustment for O when she started working, as she struggled to adapt to a communication style that requires her to read between the lines. O also notes that she has no one to connect with at work, as everyone is outside of her culture, and she keeps to herself because of previous experiences.

3. Importance of third spaces

O mentioned that her church was a key social space outside of work and home and the center for all her socialization. At church, she connects mostly with people outside of her culture. When she first visited this church, someone outside of her culture heard her singing and immediately invited her to join the church choir; O greatly appreciated this gesture.

Interview Reflection

The interviews allowed me to have very intimate interpersonal conversations with my interviewees, which led to great insights. As a design method, the interviews gave me an option to ask people questions that they may not have asked themselves and challenged them to think about their experiences more critically and from a different lens. My interviews highlighted a stark contrast between members of an older and younger generation of immigrants, who have massively different outlooks and perspectives on cross-cultural communication. However, an observation would not have revealed such differences, as the older of the two has learned to mask her feelings when in public. Furthermore, the interview allowed the interviewees to tell me things that cannot be observed within a one-hour window, e.g. subject O's approach to visiting friends within versus outside of her culture.

The most surprising part of the interview for me was definitely how different my two interviewees were. Despite both being women immigrants in STEM, the time during which they came led to massively different perceptions. I was also surprised by how open O was right out of the gate, as she immediately began to open up about her experiences with her toxic workplace and how cultural boundaries prevented her from having a good experience there. Next time I interview, I definitely plan to make more notes of facial expressions and body language, as this time I was more focused on just writing all the words down. I may even choose to explore recording and transcription tools to put less pressure on myself to write everything down the first time. I also struggled a bit with my handwriting and deciphering my notes afterwards, so it may be a good idea to do my summaries and analyses right after/soon after I finish my interviews. Overall, I think the interviews definitely led to the most insights in terms of guiding our design direction.

Other User Research

Due to a change in topic and time constraints associated with this, we did not conduct additional user research. Our original project idea was to explore homeschooled children who are looking for ways to make friends. However, the nature of this assignment would have required us to interview and observe homeschooled children. While we believed we would be able to conduct interviews with our target users, we were not confident in our ability to conduct the necessary observations. Thus, we decided to go in a new direction, limiting the time available to conduct excess user research.

Secondary Review

Existing Work

Digital Tools Enhancing Cross-Cultural Communication

In the age of the digitally globalized environment, people and data flows have become much faster, allowing for greater scopes of communication and causing a major shift in people's social lives. One such change is the increased access to people of a different culture, and as such, to people who speak different languages from one another, increasing the likelihood of certain barriers during online communication (e.g. language barriers). The growing need for cross-cultural communication skills and interactions is thus evident. Online tools have simplified cross-cultural communication by providing a buffer between individuals. In fact, Lifintsev and Wellbrock (2019) found that for many people, it is easier to communicate with someone of a different culture through online measures rather than "face-to-face." This is especially true when language barriers are present.

The proliferation of tools like online translators and autocorrect has also helped to increase the confidence of non-native speakers when communicating in a foreign language (Lifintsev and Wellbrock, 2019). Because of their practical and successful application in bridging the gap between people of different cultures, these technologies are extremely valuable.

Moreover, these technologies are improving over time, increasing their effectiveness, accuracy, and ultimately, their use. When reviewing research on computing technologies used in cross-cultural learning, Shadiev et al. (2021) found that though speech-enabled language translation technology has existed for a long time, scholars have rarely used it until recently. This is because speech recognition and computer-aided translation technologies have improved greatly in the last few years, making speech-enabled language translation more useful.

These studies suggest that digital tools can play an important role in enhancing communication between people of different cultures. They could facilitate deeper and broader connection. By reducing language barriers, they allow people to connect more directly without relying on a middleman or human translator. This direct exchange may encourage deeper, more personal conversations, since individuals might feel more comfortable sharing openly when their words are not filtered through someone else. In terms of our project, these findings suggest that a digital solution focused on communication could enhance user connection.

Immersive & Interactive Virtual Spaces

Due to the blocking of offline channels of cultural dissemination by epidemics in the past few years, virtual and interactive spaces have become another important medium for cross-cultural communication, acting as channels to empower and enhance cross-cultural connection. In 2021, a China-Greece cultural exchange was facilitated by a virtual exhibit hosted by the National Archeological Museum of Greece. This exhibit presented Chinese Terracotta Warriors and the Horses of China using a 3D spatial environment. Ma et al.

analyze this project in their 2023 case study discussing how such methods allow for the presentation of unmovable relics and enable the cross-cultural public to gain a greater understanding of the culture, its relics, and their significance and history. They also state that these methods enhance the efficient sharing of heritage in an engaging way, urging the use of content-based production for the cross-cultural communication of heritage in the post-popular era (Ma, Li, An, 2023).

Another study on the integration of virtual technologies explores a more hands-on application of promoting cultural awareness. Tang and Won (2025) propose a framework of applying VR/AR and 3D modeling to the restoration of textile artifacts. In a mixed-methods study of a virtual platform, immersive methods led to a 28% increase in user engagement scores and an increase from 3.1 to 4.2 on a 5-point scale in user satisfaction. These studies show potential applications of AR/VR technologies in cross-cultural connection and are an avenue we will explore. These technologies also pair well with gamification, which would further increase engagement. For our project, AR/VR may play a significant role in boosting cross-cultural connection through interactive and immersive spaces for cultural exchange and discovery.

Content Creation to Share Experiences and Preserve Cultural Histories

Digital storytelling allows individuals and communities to understand and validate identities, challenge existing narratives, and foster diversity (Rodriguez L. et al., 2021). Ajitoni (2024) explored the connection between social media-based digital storytelling and cultural narratives. Through platforms such as Instagram and Facebook, people with shared cultural backgrounds can connect with each other. Instagram allows visual storytelling through photos and videos, whereas Facebook promotes long-form storytelling and community building. However, challenges such as cultural appropriation, misrepresentation, and authenticity can emerge. Utilizing emerging technologies like AR and VR offer immersive experiences but also raise risks of cultural uniformity. Future research is needed to explore the effects of digital storytelling on cultural memory and to develop ethical frameworks for responsible digital behavior.

An important aspect of preserving cultural history is preserving language. The Penan Ooro' language traditionally uses leaves, twigs, and branches as communication tokens. However, with settlement, the language has been fading and is not used by the younger generation. To address this, a digitization project began in 2014 to document the language through photos, videos, drawings, and written descriptions to preserve it for future generations and overcome cultural stigmas. An app was developed after multiple iterations that allows the Penan youth to send each other Ooro messages by arranging 2D graphical representations of leaves and twigs to create messages (Winschiers-Theophilus et al., 2019).

People engage more deeply with different cultures when the experiences are shareable and interactive. Preserving culture through language and stories allows cross-generational learning and encourages meaningful exchange. For our project, this suggests that tools for cultural mixing should encourage users to co-create and explore cultural narratives, bringing together communities through participatory and interactive experiences.

Persistent Challenges

Homophily & Algorithmic Echo Chambers

One of the barriers to cultural connections is homophily, or the tendency for people to prefer associating with people like them. This phenomenon results in fewer cross-group ties, including cross-cultural ones. Modern social media algorithms, which prioritize engagement, can reinforce this phenomenon. Specifically, the concern is that social media algorithms combine with tendencies to interact with like-minded others to create an environment that predominantly exposes users to congenial, opinion-reinforcing content to the exclusion of more diverse, opinion-challenging content (Kitchens et al., 2020).

One proposed solution to this issue is serendipitous design, or the intentional design of social media algorithms to help users discover unusual or unexpected content as a replacement for homophilic content algorithms. Reviglio (2017) emphasized the use of serendipity as a design strategy to address the risks associated with hyper-personalization and to redesign media policies to ensure exposing people to different perspectives by giving people more control over what they see and engage with. For our project, we will prioritize serendipitous design so as not to advocate for homophilous connection.

Structural & Access Barriers

Cross-cultural connection is also hampered by structural barriers, including geography, economics, language, time, and others. In other words, people from different cultural backgrounds are often divided by where they live, work, and recreate. These barriers are further exacerbated by financial and socioeconomic factors (Buthe et al., 2020). Several digital strategies can combat these barriers. Firstly, events can be held hybrid or virtually to reduce the impact of geographical barriers. Asynchronous events and activities can reduce the impact of temporal barriers (e.g. time zones, work schedules, etc.). Low-bandwidth options can enable those with less capable technology to participate as well. Furthermore, technologies such as online translators have proven useful beyond cultural exploration, enabling key communication with lingual minorities in China during the Covid-19 pandemic. Tekwa and Liu (2024) concluded that machine-translated instant messaging is effective for mitigating language barriers during crises, where human translators are not available, ensuring information reaches linguistic minority communities. Some of the technologies that help break down or mitigate these barriers include video call platforms, instant messaging services, online gaming platforms, AI translation tools, and others. For our project, we can consider how these technologies can be implemented in ways that reshape how we connect across cultures by reducing the impact of structural barriers. It also means we should consider implementing the practices mentioned above (hybrid/virtually accessible, asynchronous, low-bandwidth, etc.) in our design and be mindful of designing for those who face structural and access barriers.

Trust, Prejudice, & Intergroup Anxiety

Another major barrier to cross-cultural connection lies in issues of trust, prejudice, and intergroup anxiety. Implicit biases are widespread, subconscious, and often tied to group associations and identity. Prejudice is particularly problematic; it can often lead to discrimination, acts of hate, and violence. Pettigrew and Tropp (2006) suggest that prejudice can be reduced through intergroup contact, or increasing time spent with people of a prejudiced group. Emerging research suggests that highly immersive VR environments are also capable of reducing prejudice and thus increasing trust between individuals of different cultures. An analysis of multiple studies on the efficacy of VR experiences to reduce prejudice from Tassinari et al. (2022) reveals that factors like the level of immersion and whether the embodied experience is positive or

negative may play a crucial role in determining whether embodiment in an outgroup member reduces prejudice.

For our project, this suggests that tools for cultural mixing should create safe, respectful, and embodied experiences that help users from different cultures and backgrounds confront biases, build trust, and develop meaningful connections.

Other Stakeholders

Beyond our primary stakeholder of individuals seeking to increase cross-cultural connections, other stakeholders include but are not limited to:

Universities

Universities and their student clubs are significant hubs for cross-cultural interaction. Students from different nationalities, ethnicities, and disciplines come together through academic programs, extracurricular activities, and cultural events. Universities currently make use of online platforms (for example, social media) and offline spaces (for example, cultural clubs) for cultural mixing. Their active and diverse community of students can help co-create and test ideas aimed at the younger generation. New tools can change how they manage events and student participation, as well as how they measure the impact of events.

Cultural Organizations

Such organizations act as entry points to finding community for many people. They create safe spaces for individuals belonging to different backgrounds to interact with each other and learn about different cultures. This stakeholder group is valuable for providing participatory feedback on ideation and prototyping phases, as they not only host events but are also involved in the design of these events, interacting with diverse populations directly. Thus, they have deep insight into the motivations and barriers people experience when engaging cross-culturally. This group can benefit from changes to existing practices such as using tools that make it easier to plan and organize events, utilizing online platforms for cross-cultural interaction, and reducing administrative burden.

Employers

Many workplaces have a diverse population of employees. HR teams often run events for diversity and inclusion. They already use mentorship and team activities to encourage cross-cultural understanding. They can offer real-world context as to what is feasible, keeping in mind the constraints of workplaces, acting as early adopters of technologies. Through technologies, they can benefit from the enhancement of their diversity events and measuring impact, making cultural mixing within professional organizations easier.

Problem Analysis and Synthesis

Gaps in Existing Systems

Corporate Diversity, Equity, and Inclusion (DEI) Training (Physical & Digital)

Research shows that DEI training (both digital and non-digital) raises initial awareness of bias and company commitment to diversity and also provides a common language for discussing concepts like microaggressions. However, they mostly fail to encourage mixing because they are often mandatory, short-term, and focused on individuals' internal implicit bias rather than systemic issues. This leads to defensive reactions and the perception of the training as a mere organizational box-checking exercise. The digital version of this solution is to have the group watch a short video or complete an online training session. The physical version of this practice is to force a group of people to gather in the same space and perform certain interactive activities involving identifying each other's cultural background and difference. These activities are usually held to prevent lawsuits instead of fostering social mixing. The approach neglects the principles of the Contact Hypothesis, which requires participants to work together toward a common goal on a level playing field; instead, training often creates asymmetrical power dynamics where the majority group feels accused. Frank Dobbin and Alexandra Kaled argue that these programs often fail because they are disconnected from changes to career systems (recruiting, promotion) and primarily serve to avert lawsuits, noting that "mandatory programs are counterproductive" and that effectiveness lies in systems that facilitate social contact (Dobbin & Kaled, 2018).

University International Student Orientation (Physical)

University orientations are deficient because such events unintentionally create an asymmetrical burden on international students. The upside of such events is that they provide essential logistical scaffolding (visas, banking) for survival and settlement. However, the international student orientation system is designed as a "one-time dump" of information, which forces people to share one space. Studies demonstrate that spatial proximity and intercultural contact do not automatically result in meaningful interactions, with cross-cultural friendships rarely developing in higher educational settings (Rose-Redwood & Rose-Redwood, 2018). Typically, after those first three days, the program just drops off, treating cultural mixing like it's entirely the international student's homework, ignoring the domestic/host student population, and failing to integrate initial contact into the rest of the academic year. This method of cultural mixing lacks the intention of helping students create a sustainable relationship. Furthermore, by grouping international students heavily based on nationality for convenience and comfort, the system unintentionally reinforces homogeneous safety nets that reduce the later incentive for students to risk the social and emotional labor of seeking out

cross-cultural connections. This contributes directly to the "masking" and social isolation reported by one of the interviewees.

Social Media "Global" Communities (Digital)

Social media seems like the perfect solution for mixing. It connects people globally over shared interests like music or running. While social media can facilitate intercultural connections and help newcomers acquire communication skills and cultural knowledge (Li & Croucher, 2020), empirical evidence suggests problematic outcomes. A longitudinal study of Muslim immigrants found that increased Facebook use for ingroup social interaction actually decreased motivation to culturally adapt and led to more negative perceptions of the dominant culture (Croucher & Rahmani, 2015). The fundamental design of these platforms actively works against meaningful mixing. First, there's the anonymity and low accountability problem; the high risk of trolling and immediate affective polarization destroys psychological safety, which is vital for vulnerability. Second, the entire system is built on engagement metrics, leading to algorithmic segregation where you are constantly fed more of what you already like, reinforcing cultural "echo chambers" instead of pushing for unexpected cross-cultural contact. Because of how the interactive system is designed for social media platforms, mixing is reduced to shallow consumption (a like, a comment, or just views), failing to ever reach the level of high investment or mandated cooperation needed to build genuine trust among different cultural groups, making it a powerful system for cultural distribution but a terrible one for cultural integration. In conclusion, social media as a method of encouraging cultural mixing failed because it's only capable of building superficial connections most of the time.

Language Exchange Apps (Tandem, HelloTalk - Digital)

Language exchange apps seem perfectly designed for cultural mixing, as their strength is based on mutual benefit and shared transactional purpose: "I teach you my language, you teach me yours." This establishes an initial equal-status dynamic, a key component of the Contact Hypothesis. However, this system's deficiency lies in its structural focus on utility over intimacy. It's interesting how this echoes our observation—people only seem to gather and mix when they're prompted by a practical or functional need. It disproves that a shared, non-cultural purpose is often the easiest entry point for interaction, overriding the social anxieties or the need to "mask" that we heard about in the interviews. The primary interaction is linguistic learning and correction, not social or emotional sharing, keeping the relationship transactional and fragile. This high personal risk often pushes users to create strict boundaries, preventing the relationship from evolving into authentic cultural exchange. Research reveals significant misuse issues, with users often treating these platforms as dating or social networking tools rather than genuine language learning tools (Wardak, 2024; Topal, 2024).

Collaborative Gaming Platforms (Discord, Cross-Platform MMOs - Digital)

Collaborative gaming platforms are brilliant at creating mandated interdependence, which is a core success factor. The strength of the collaborative gaming platforms lies in immediately providing a shared, non-cultural goal, such as winning a match or completing a raid, that forces players from diverse global backgrounds to cooperate, instantly establishing a unifying "teammate" identity. However, these systems fail at deep cultural mixing for two main reasons. First, communication is almost entirely task-driven; the design of the system rarely encourages conversations that extend beyond game strategy, resulting in

shallow engagement. Second, they struggle massively with psychological safety. The anonymity, real-time pressure, and competitive nature of the environment often enable and even encourage toxic behavior and targeted aggressions often masked as "trash talk," which immediately break down trust and force users from minority groups to retreat or mask their real-world identities (Sun, 2024).

Initial User Requirements

1. A good system should connect people via interests, goals, values, etc.

Our user studies revealed that an overwhelming majority of people connect with others through shared interests and commonalities. This is true about backgrounds and engaging in activities together—people tend to spend time with those who are similar to them. While this dynamic often contributes to maintaining separation between cultural groups, many younger participants reported a sense of camaraderie across cultural boundaries when they shared similar interests. For example, the slackliners at Tech Green initially gathered for slacklining but ended up simply hanging out together, demonstrating that the activity served as a starting point for broader social connection.

A well-designed system should therefore support this connection of interests by operating in both physical contexts and digital spaces, ensuring that interests across all platforms can be shared. This would allow for users to do physical activities, such as slacklining, while also fostering an environment for connecting over physical boundaries, for example, through an online watch party.

2. A good system should not value any one culture over another.

Our user studies showed that many participants found it challenging to connect across cultural boundaries. These challenges were often due to feelings of exclusion or difficulty understanding unfamiliar cultural references. Our interviewees emphasized the importance of respecting all cultural practices, noting that every group has its own definition of "normal," making it important to embrace different practices.

Participants also expressed the need for openness, for respect, and for willingness to engage with new ideas and traditions. No one culture should be put over another. For example, one interviewee described feeling uncomfortable attending an event that, while open to everyone, did not feel intended for him. In this case, though he wanted to be supportive, he felt too self-conscious to participate, a feeling that was likely motivated by the historical dynamics associated with his cultural background. A well-designed system would acknowledge these barriers and create conditions where his presence would be welcomed and valued, allowing him to engage without fear of overstepping.

To support this, a well-designed system must integrate into established spaces, rather than just add to them. It should also be designed to promote equity through features like multilingual support, balanced cultural representation, and accessibility for people with disabilities (e.g. screen reader compatibility or haptic feedback). Finally, not valuing one background over another would mean that the solution should also remain accessible for people across different economic statuses.

3. A good system should foster intentional, genuine, and safe interactions between people from different cultural backgrounds.

Our user studies showed that people value intentional and genuine cross-cultural interactions. Many participants emphasized the importance of asking questions, showing genuine curiosity, and engaging in open communication when getting to know someone from a different background. They highlighted that interactions should not feel like transactions but rather take place in environments where everyone is “on the same page” and committed to connecting across cultures.

Several interviewees shared experiences that further highlight this need for intentional, genuine, and safe spaces. One interviewee noted her experience with divided groups, stating that she was not sure how to conquer this divide and felt discouraged to do so. This shows the need for intentionality in these settings, showing that cultural mixing is not simply about physical proximity and shared context, but it also requires psychological safety. Similarly, one participant shared that she would be reluctant to use any sort of system that wasn’t a “girls-only” space, highlighting the importance for the system to include women’s safety mechanisms as well.

To achieve this genuine connection, the system must therefore create safe and supportive environments, whether in online platforms or in-person spaces, where cultural exchange is encouraged and normalized. It should foster trust amongst users, allowing them to grow closer to others over time. Ultimately, people should be able to engage in these activities in an emotionally and physically safe but engaging way.

4. A good system should have a low barrier to entry.

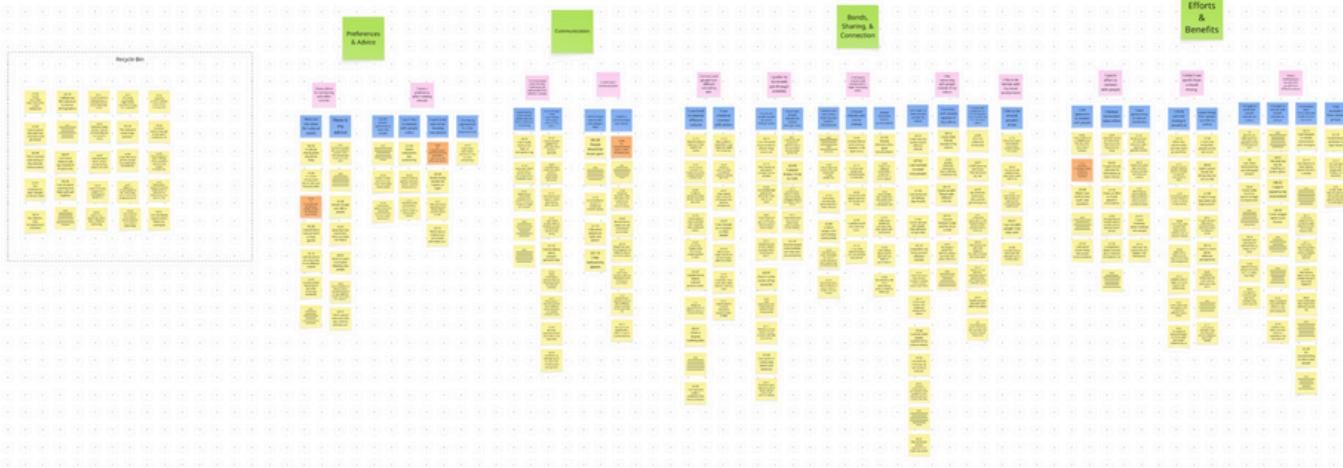
Our user studies show that cross-cultural interactions should feel natural and accessible and not forced. Participants emphasized that dominant group dynamics can make interactions feel performative or difficult for minority participants. Fear and safety concerns are major deterrents, especially for individuals with less power. To address this, the system must ensure entry points are inviting, equitable, and safe, encouraging people to participate without pressure or obligation.

5. A good system should have teaching elements.

Our user studies indicated that participants valued learning from interactions with people of different cultural backgrounds. Many saw cross-cultural connections as opportunities to broaden perspectives, acquire new knowledge, and add diversity to their social circles. They expressed interest in learning new languages, exploring different traditions, and engaging with viewpoints outside their own, suggesting that systems should include features that facilitate cultural exchange and education.

This means the system should operate effectively in contexts where learning already occurs while also supporting lifelong learning opportunities. It must also be accessible to individuals with learning disabilities to ensure equitable participation. Because language often serves as a major barrier to cross-cultural connection, offering opportunities to teach and learn languages would significantly strengthen cultural ties. Another good example of a teaching opportunity would be a cultural activity such as Garba. This could be designed not only as a social event but also as a teaching experience, providing both cultural immersion and educational value.

Affinity Map



Link to affinity map: https://miro.com/app/board/uXjVJHm1UPM=/?share_link_id=635802295937

Personas

Our team chose Personas as the additional diagram. This is a representative profile that embodies the behaviors, motivations, and challenges of a user. We selected a persona because it helps us empathize with the users and see the problem area from their perspective. By going through the process of creating representations of our users, we can better design for their needs and real-world contexts. While it may additionally be a useful device for communicating our user base to others in a concise and easy-to-understand manner, our main aim as a team in completing the personas was to come to an understanding of for whom we will be designing.

The entire team participated in the persona activity, working together to build affinity maps, which helped inform the persona creation.

Though they both help us to better understand our target users, there are differences in affinity diagramming and creating personas. Affinity diagramming involves sorting and clustering data into themes and patterns. On the other hand, persona creation is about synthesizing those themes into a specific, relatable character. The process shifts from organizing data to storytelling. Affinity diagrams highlight what we learned, whereas the persona shows who we are designing for, uncovering their goals, motivations, context, and pain points.



Irene Simpson

The Quiet Observer



Age/Identifying Gender
59/Female



Location
Brooklyn, NY



Occupation
Marketing Associate



Family Status
Single/No Kids

"I want to learn about other cultures, but big events overwhelm me. I feel more comfortable in small groups where conversations happen naturally."

Bio

2nd gen immigrant, recently moved into a diverse urban community of a younger age group.

Goals

- Wants to feel a sense of belonging in her new community while also sharing her life experiences with others
- Also to make her friend group more diverse.

Pains

- Finds it difficult to break into existing social groups that seem younger or culturally different.
- Notices that mixing activities often cater to younger residents, leaving her feeling out of place.
- Hesitant to approach people for fear of being judged or dismissed
- Struggles to initiate interactions, even if she wants to join in.
- Often overlooked in group activities because she's quiet.



Aya

The busy Local



Age/Identifying Gender
29/Female



Location
Atlanta, GA



Occupation
Childcare Specialist



Family Status
Single/No Kids

"I'd love to meet new people from different cultural background, but honestly, with my working schedule, I don't have time to shop around and prepare for events that feel like extra effort."

Personality

Friendly but practical; tends to stick with people she already knows because it's easier.

Goals

- Wants to engage with people from different cultural backgrounds to broaden her perspective and enrich her experience, but needs opportunities that fit naturally into her busy daily routine.

Pains

- Finds it easier to stay within her existing circle of friends.
- Sees cultural events advertised but feels they don't align with her schedule or interests.
- Thinks some events are too formal or "performative," not authentic.
- Worries about unintentionally offending others by not understanding cultural norms.



Carlos

First Year International student from Spain



Age/Identifying Gender
19/Male



Location
Queens, NY



Occupation
College Student



Family Status
Single/No Kids

"I really want to connect with people outside my own culture, but sometimes I don't know how to approach groups that already seem so close."

Goals

- Wants to make friends from different backgrounds and improve his English.

Personality

Outgoing, eager to learn about different cultures, but feels shy when approaching groups who already know each other.

Pain Points

- Finds it intimidating when cultural groups stick together; doesn't know where to start conversations.
- Sometimes perceives cultural cliques as unwelcoming.
- Feels homesick, which makes it harder to engage.

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