



Beneath Walls and Naked Souls: Factors influencing Intercultural Meaningful Social Interactions in Public Places of Istanbul

María Laura Ramírez Galleguillos
Koç University Arçelik Research
Center for Creative Industries, Koç
University, Istanbul, Turkey
mgalleguillos18@ku.edu.tr

Aya Eloiriachi
Sociology Department, College of
Social Sciences and Humanities, Koç
University, Istanbul, Turkey
aloiriachi19@ku.edu.tr

Aykut Coşkun
Koç University Arçelik Research
Center for Creative Industries, Koç
University, Istanbul, Turkey
aykutcoskun@ku.edu.tr

ABSTRACT

Individuals often avoid intercultural interactions due to biases and stereotyped perceptions about others. However, these encounters are needed to promote social inclusion and diversity. Previous PD studies have supported migrants' social inclusion through developing their social capital and empowerment. Very few studies explored the facilitation of intercultural interactions within everyday contexts, like public places; further, most studies provide western perspectives. Addressing this gap, we conducted a focus group study with migrants and locals living in Istanbul, a city connecting eastern and western cultures, to explore how they perceive intercultural meaningful social interactions (IMSI). We asked participants to share poems about meaningful interactions, opening a dialogue about their intercultural life experiences. This technique allowed us to identify abstract qualities of IMSI and factors that influence them. We contribute to PD work on social inclusion by presenting in-between perspectives of IMSI and discussing opportunities for facilitating IMSI in a super-diverse city.

CCS CONCEPTS

• **B7; Human-centered computing** → Interaction design; Interaction design process and methods; Participatory design.

KEYWORDS

Meaningful Social Interactions, Intercultural Interactions, Public Places, Social Inclusion, Participatory Design

ACM Reference Format:

María Laura Ramírez Galleguillos, Aya Eloiriachi, and Aykut Coşkun. 2022. Beneath Walls and Naked Souls: Factors influencing Intercultural Meaningful Social Interactions in Public Places of Istanbul. In *Participatory Design Conference 2022: Volume 1 (PDC 2022 Vol. 1)*, August 19–September 01, 2022, Newcastle upon Tyne, United Kingdom. ACM, New York, NY, USA, 12 pages. <https://doi.org/10.1145/3536169.3537793>

Permission to make digital or hard copies of all or part of this work for personal or classroom use is granted without fee provided that copies are not made or distributed for profit or commercial advantage and that copies bear this notice and the full citation on the first page. Copyrights for components of this work owned by others than the author(s) must be honored. Abstracting with credit is permitted. To copy otherwise, or republish, to post on servers or to redistribute to lists, requires prior specific permission and/or a fee. Request permissions from permissions@acm.org.

PDC 2022 Vol. 1, August 19–September 01, 2022, Newcastle upon Tyne, United Kingdom
© 2022 Copyright held by the owner/author(s). Publication rights licensed to ACM.
ACM ISBN 978-1-4503-9388-1/22/08...\$15.00
<https://doi.org/10.1145/3536169.3537793>

1 INTRODUCTION

Meaningful social interactions support the integration of different communities as part of the same social system [18, 89] and foster collaboration and diversity among these communities [40, 59, 70, 79]. Meaningful interactions are encounters that shift negative perspectives, stereotypes, and biases about *others* [2, 6, 17, 73, 74, 91, 93]. However, to achieve these outcomes, it is required that these interactions be positive, deep, and sustained in time [34]. Still, individuals tend to interact and create networks with people like themselves [53, 98], avoiding interactions with people perceived as different. Thus, interactions between intercultural strangers (i.e., people from different cultures who are not acquainted with each other. For example, immigrants and locals who have not previously met) might be avoided due to language differences, biases, and prejudices against other social or cultural groups [5]. Furthermore, an interaction does not directly translate into a positive interaction; it can even be detrimental for intergroup contact if it is negative or validates biases [77].

Promoting Intercultural Meaningful Social Interactions (IMSI) under the current global migration situation is critical for social integration. Despite this significance, previous work on meaningful interactions has not directly considered intercultural difficulties, such as language barriers and intercultural conflicts. Besides, most of the studies have been conducted in western cities, with a high focus in the UK, which do not necessarily represent other ways of understanding and experiencing diversity and interculturality. Thus, in order to facilitate IMSI, more work exploring factors influencing these interactions in other-than-western contexts is needed.

Participatory Design (PD) is concerned with power issues [37, 54] and contributes to pluralism in society and design. Previously, PD projects have tried to facilitate migrants' social inclusion [80]; for example, by promoting their economic empowerment [22, 58, 62] and social capital [96], helping develop essential skills to be part of society [39], and enabling their participation in the design of the public space [83]. However, we have not found any study exploring how to facilitate meaningful social interactions between immigrants and locals within everyday contexts, such as in public places.

Addressing these gaps, we explored what makes an interaction meaningful from participants' perspectives in Istanbul, a super-diverse city in between east and west, to unpack design opportunities for facilitating IMSI in public places. Public places are framed as the context of these interactions because they represent a critical encounter space between different social groups [75, 76]. We

applied a participatory approach to unpack abstract concepts and build knowledge based on a shared understanding [51]. Hence, we conducted a focus group session using poems created by participants as props to ignite sentiments and drive a discussion around IMSI. These poems served as a shared discussion material to connect feelings and thoughts [15], capturing participants' life events and perceptions concerning IMSI.

The contribution of this study is twofold. First, we present an in-between east and west exploration of IMSI based on participants' situated knowledge [20, 38], revealing different perceptions of IMSI and factors that influence them. Second, we present and discuss a set of design opportunities for facilitating IMSI in public places. With all the above, we aim to encourage PD practitioners and researchers to rethink how common public places could promote social inclusion in diverse migration contexts.

2 RELATED WORK

2.1 Social Inclusion and Migration in Istanbul

Social inclusion seeks to foster stable, safe, and just societies. It promotes diverse groups coming together with non-discrimination, tolerance, respect for diversity, equality, solidarity, security, and participation of all people, including underprivileged and vulnerable groups [97]. Social inclusion of migrants requires establishing mutual relations [26] wherein newcomers develop their social networks within the hosting society, while hosting institutions and communities provide spaces to interact and connect with others who differ in age, ethnicity, and social, economic, and cultural background [35, 50]. Hence, intercultural interactions are needed to promote social inclusion; however, they can be avoided due to specific barriers like physical segregation, lack of opportunities, language barriers, mistrust, and anxiety [6].

Since its origins, Istanbul has been a multicultural city with a diversity of coexisting cultures dating as far as the Roman and Ottoman empires [65]. Throughout its history, Istanbul has been a place for the relocation of migrants, both internal and external, hence developing a super-diversity of migrants [64]. Furthermore, Turkey was the first country to be identified as a transit space, for its role as the first asylum country on different refugee's journeys fleeing conflicts such as the Iranian Revolution, the Iran-Iraq War [73, 93], and for migrants on their route to Europe due to its critical location in-between Europe and Asia. Thus, it is a relevant city to explore concerning migrants' social integration into Turkish society and the possibility for migrants and locals currently living in Turkey to migrate to Europe and Asia.

According to the International Organization for Migration, Turkey hosts one of the largest migrant populations in the world. By December 2021, there were 5 million migrants (i.e., foreign-born) in Turkey, 98% of whom live in cities [90]. Migrants in Istanbul often stay within their ethnic circles. For instance, African migrants reported living with people from the same country, ethnicity, or religion and frequenting public spaces shared by perceived similar groups. Although they did not express having overall negative experiences with Turks, they report being ill-treated by strangers in Istanbul [16]. Therefore, even within the super-diverse context, this city is not a space free of segregation and avoidance between

migrants and locals. Hence, given Istanbul's critical location for migration between east and west and the concentration of a diversity of migrants, exploring IMSI under such an intercultural context could unpack relevant perspectives about IMSI that might not be grasped in other eastern or western contexts.

2.2 Migration in HCI and participatory design

PD has previously been concerned with migrants' social inclusion encouraging migrants to participate in projects that affect their lives [37]. Examples include efforts to provide better care for refugees in Australia [17], supporting intercultural collaboration between young, forced immigrants and their host community [3], codesigning interactive technologies with immigrant teens [27], and developing digital technologies for maintaining migrants' cultural heritage [31]. Also, there have been projects supporting the development of migrants' social capital and community-building activities. Examples are the exploration of storytelling for the empowerment of migrant women in Germany [96] and Finland [10] and of Palestinian youth in the West Bank [84]; the development of a community problem-solving platform at Zaatari camp [62]; the use of VR technologies to aid perspective-taking between intercultural groups [13] and different ICTs supporting social capital [47]. Additionally, ICTs have been developed to help migrants keep in contact with their families [30, 72], overcome language barriers [1, 7], understand the regulations in the hosting community [39, 92], increase their digital inclusion to improve their social interactions [43], and receive training for their professional development [1].

With all the support and benefits that such explorations have represented for the life of thousands of migrants in different countries, most of these works develop applications that do not aim to promote direct contact between intercultural groups. Moreover, the few studies promoting encounters do it through collaborative workshops where optimal conditions for positive interactions [2, 82] (e.g., shared goals, equal status) can be manipulated. However, these conditions are not necessarily met in everyday intercultural contexts, where individuals act intuitively, avoiding each other.

2.3 Meaningful Social Interactions

Meaningful encounters have been proposed as a kind of interaction that can improve relationships, build community cohesion, and could shift negative perspectives of others [5, 94]. According to previous studies, these interactions occur between people who have a different age, faith, gender, or socio-economic status background, there can be diverse kinds of interactions, and they need to be positive and beyond a superficial level [34].

Previous design research exploring meaningfulness [23, 64, 79, 91] has mainly focused on meaningful experiences with artifacts [61, 66] to support product attachment [36, 42]. Meaningful interactions between humans have been less investigated in design literature. In one of the few examples, Litt et al. [60] explored meaningful interactions in the context of social media, remarking that there is still a limited and disjointed understanding of these interactions and the characteristics that make them valuable. The authors posit that meaningful interactions are typically planned and held between acquainted individuals. In another study, Fonseca et al. [28] explored children and teenagers' perceptions of meaningful

social interactions (MSI) by studying when and how they occur during gameplay. The authors proposed several design recommendations to support serious games for promoting MSI, indicating that such designs should consider participants' preferences and needs to facilitate interactions that are both desired and meaningful. Furthermore, Ramírez-Galleguillos et al. [81] investigated how MSI develops, identifying that a memorable event needs to occur for the interaction to be meaningful. The authors explained that meaningful interactions could develop through an exchange of intercultural facets or through sharing human connections and experiences beyond the cultural divide. Finally, the work of Askins and Pain [6] explored how elements of a participatory art project enabled and disabled meaningful interaction between young people with African and British heritage. In this study, the authors used Prat's concept of *contact zones* [78], referring to social spaces where diverse cultural groups meet and interact, sometimes in conflict. Still, the authors posit that contact zones have been missing from the social integration debate.

2.3.1 Public Places and Meaningful Interactions. Public places are areas physically accessible to all, regardless of ownership [44], where unacquainted people from diverse backgrounds come together and inhabit the city [34, 41, 49, 67]. Public places are embedded with meanings [21] and can provide an ideal location for building social capital [68] as they enable the construction of social relations between people from various backgrounds [29].

Goffman [32], who studied social interactions in public places, explained that people transit from merely being present in the same place to participating in focused interactions. Also, the work of Hornecker [45, 46] suggests that social interactions in public places are intervened by the design of the place. Hence, the interconnections between the physical space, its structure, and the dimensions of the public place shape how people interact with each other [68]. In later years, more technology has been integrated into public places, to influence public behavior e.g., promoting social interactions [74], and to optimize ergonomics and affordances of the built environment [88].

Placemaking has been explored in PD, where researchers have proposed building places coherent with PD values of plurality, equality, and democracy. Examples of the latter are the works including residents [12], socially disadvantaged citizens [33] and immigrants, refugees, and asylum seekers in urban planning [83] and on the design of shelters [23]. Furthermore, meaningful experiences in public places have been studied as well. For instance, Lentini and Decortis [57] proposed that personal and relational experiences determine the emotional relationships developed towards a place. Similarly, Ujang, Kozłowski, and Maulan [91] explored place attachment in Kuala Lumpur, finding that the development of meaningful spaces could influence it, but it does not provide an explicit characterization of these spaces. Further, Askins [5] argued that informal spaces enable meaningful encounters through specific engagement activities in organizations, understanding public places as NGOs, and other organizationally mediated areas. Even though this study frames public places slightly differently from our research, it clearly posits that individual encounters can introduce collective change in super-diversity contexts. Finally, Amin [2] argues that spaces of habitual engagement, like public places, can foster intercultural

understanding; still, they do not explain how, arguing that interventions are only meaningful in a situated social and cultural dynamic.

In sum, although previous studies on MSI provide a baseline for examining these interactions from a design perspective (e.g., providing definitions), current knowledge is limited concerning design opportunities for facilitating these interactions. To the best of our knowledge, there has been no attempt to portray IMSI, and factors that influence them. Furthermore, current explorations of public places have not profoundly explored what opportunities public technologies can represent for IMSI. Hence, it is challenging for designers to assess, evaluate and discuss meaning as the quality of interaction due to the personal and subjective characteristics of meaning [69] and the little understanding of characteristics and dimensions of meaningfulness [52]. Addressing these gaps, we contribute to PD literature by unpacking characteristics of IMSI and identifying relevant opportunities to facilitate them in public places of Istanbul, a super-diverse city and unique concerning migration flows between east and west, from a participant standpoint [69]. Considering that most of the existing literature about meaningful encounters and public places are situated in western cities, which might not necessarily be extended to other-than-western contexts, we believe our study could contribute to building a more pluralistic understanding of IMSI.

3 METHODOLOGY

We aimed to unpack how IMSI are perceived and experienced from a participant's standpoint and extract lessons to facilitate these interactions in public places. We captured this knowledge through a focus group in which we used poems as props with nine immigrants and six locals living in Istanbul.

3.1 Research context and Participants

We organized a semi-structured focus group with the Poetry Club of *Istanbul and I*¹, an NGO that organizes different social inclusion activities for disadvantaged and displaced communities located in Istanbul. Migrants and Turkish citizens participate in these activities. Two of the authors previously attended the Poetry Club to understand its dynamics. In the Poetry Club sessions, participants read and discuss poems created by other authors. Moreover, usually, they share in different languages, embracing a diversity of mother tongues and participants. Their discussions are not academic or literary. Instead, they read poems and relate them to their lives and other participants' experiences. Consequently, poetry in this context represents a prop to discuss and share their personal stories connecting thinking and feeling to explore participants' inner thoughts and feelings about IMSI. Moreover, as social inclusion is a bilateral process hosting community and newcomers to adapt, accept and tolerate each other [11], inviting locals and migrants seemed critical.

In February 2020, we invited participants through the regular *Istanbul-and-I* dissemination channels to a poetry club session. Fifteen adults attended, all living in Istanbul (Figure 1). Nine participants were migrants (i.e., foreign-born); seven relocated alone, while two relocated with their families. Concerning their migration

¹www.istanbulandi.org

PARTICIPANT	AGE	NATIONALITY	TIME SPENT IN TURKEY	PRONOUNS
1	18	Syria	6	He
2	26	Azerbaijan	4	He
3	21	Turkey	since birth	She
4	18	Morocco	0.5	She
5	30	Kashmir	0.5	She
6	26	Iraq	1.5	He
7	26	Turkey	since birth	She
8	25	Morocco	3.5	She
9	24	Turkey	since birth	He
10	21	Pakistan	2.5	She
11	17	Palestine	4	She
12	17	Turkey	2.5	She
13	22	Turkey	since birth	She
14	25	Turkey	since birth	He
15	20	Vietnam	1	He
AVERAGE	22.4		2.6 for immigrants	

Figure 1: Participants' demographic information

status, two participants had temporary protection status, while the remaining seven had working or studying resident permits.

3.2 Data Collection technique

3.2.1 Poetry and metaphors in research. In this study, we used poems and metaphors as a technique to drive experience sharing [56]. In PD, different methods are applied to promote individuals' participation and engagement while designing, which are tailored according to participants' skills, goals, and stage of involvement [80]. Among these, there are diverse ways of expressing and storytelling, such as video recording, writing stories, songs, and poetry. Poetry has been used to convey and communicate meanings and as an inspiration tool for designers. For example, Marti et al. [25] used the translation of poems as inspiration for making and fabricating artifacts, showing how concepts in poetry can be transferred and integrated into the design. Poems have also been used in social inclusion projects [87], proposing intercultural collaboration to create, share, and publish poems as a way of honoring and recognizing each other, besides being a very democratic act. Also, Marti and Van der Houwen [63] used poetry to support cross-cultural design, portraying them as an alternative way of appreciating cultural diversity.

Metaphors used in poems can transcend the materiality of videos and pictures to explain how people experience and make sense of abstractions, facilitating a shared understanding of complex concepts [48, 86]. Further, metaphors have been highlighted by their qualities to facilitate sharing experiences and thoughts about both, exceptional and mundane events [95, 96]. They can be used to explain individuals' relations, values, and perspectives in social situations [55], besides revealing similarities and differences in individuals' point-of-view in a shared context. Consequently, poetry is an appropriate technique for participants to democratically explore

and share their experiences and abstract understandings of IMSI [56].

3.2.2 Data Collection procedure. The poetry club's sessions at *Istanbul and I* are organized around a specific topic. Thus, before the focus group session, we asked the participants to bring poems that referred to MSI, either written by them or others. We did not define the concept as we were looking to understand participants' perceptions. Upon arriving, we asked the participants to sign a consent form and introduced the study's aim. The participants read and discussed three poems during the session, which were created by three migrant participants living in Istanbul. The discussions following each poem were long and deep, igniting a review about their own life experiences and giving advice to others; thus, the time was not enough for each participant to share a poem. During the discussions, researchers had a passive role, allowing participants to articulate themselves and lead their dialogues freely. Researchers only intervened to posit the first question of the session: *how the poem relates to meaningful interactions*. At the end of the activity, we asked them to express what they understood as IMSI. The session lasted 4 hours and was conducted in English. It was audio recorded. The poems were collected (Figure 2), and researchers made in situ annotations.

3.3 Data Analysis

3.3.1 Analysis procedure. We transcribed the recordings and used reflective thematic analysis [14, 15] to understand the participants' perspectives on IMSI [24]. We analyzed only the transcribed discussion recordings. We were not involved in analyzing the poems and metaphors that participants read; hence, we only included the participants' discussion in the focus group. The analysis was inductive and performed in three stages. First, we conducted an individual analysis session. Each author proposed codes and themes according

Poem 1 – by P8

We are all cradled by Mother Earth since infancy,
and suckled by the same sunrays of the sun
of the Milky Way galaxy,
and inspired by the same moon in our poetry;
Yet, we build walls; we build fences
out of fear, out of our differences,
walls of bricks and prejudices,
we perceive the other as the enemy,
yet we are made from the same essences.
The cloth of humanity is unravell'd and holed,
however; through these holes
beams of light emanate.
A pesar nuestra diferencia,
nosotros podemos vivir la convivencia,
con el arma del amor,
la compasión y la gracia.

Poem 2 – by P4

Bare naked souls
In a poetic aura, generously blooming
Embrace of words
All matters dissolved into light and fog.

Poem 3 – by P1

at times of despair,
when love has left,
and I'm without a care,
in a cafe i sit and sift.
No one and nothing,
to wait for, to meet,
unseen, unheard,
in the pit of loneliness,
i lose and find myself
in the center of it all.
amongst past friends
and future lovers;
total strangers.
you drink your coffee,
stare at your phone,
get a text, smile widely,
'it's as if the universe expanded
or shrank into a grin.
you read your book
as a lover admires a beloved;
what an intellectual you are.
raise your hand,
greet your friend,

tell them you've missed them,
although you' haven't.
you speak of old days,
'you've long forgotten,
just like' you'll forget today.
you pay and leave.
our eyes' don't meet,
and we never get to talk.
we never do,
me and you.
i stare into the emptiness
of the abyss I call myself
in the blackness of the coffee.
but' it's not black,
'it's a starry night sky.
and, with you, so am i.

Figure 2: Transcription of poems discussed during the focus group presented as shared by their authors

to their analysis. Examples of these were: *definition of IMSI, impacts of meaningful interactions, barriers to interaction, positive experience, negative experience, feelings*. Then, we developed a collective analysis, in which we discussed the themes and codes again to create the final list. Finally, these codes were individually applied to the transcription and grouped into the following themes: *Personal aspects of IMSI; Impacts of IMSI; Barriers for IMSI and Opportunities for IMSI*.

3.3.2 Authors' disclosure. Qualitative studies can be influenced by the authors' identity and experiences even when advocating for neutrality. Hence, self-disclosure [4, 9] is suggested to clarify the authors' standpoint. Maria Laura and Aya, who attended the poetry club, are both immigrant women currently living in Turkey, from Chile and Morocco, respectively. Thus, they have experienced living in Turkey as a migrant. Aykut is a Turkish man and currently lives in the same country. All the authors participated in data analysis and are interested in social inclusion and facilitating positive connections between migrants and locals.

4 FINDINGS

In this section, we summarize the discussions following each poem, and then, we present the findings concerning the factors that influence IMSI.

4.1 Discussing IMSI through poems

In this section, we first report on the metaphors they identified with each poem, then introduce the topics discussed after each reading.

4.1.1 Poem 1: Breaking walls, building fences. The main topics discussed after reading this poem were prejudices and personal spaces.

Participants described walls as prejudices, conceived as the bricks that build walls between people. They described prejudices as more dangerous than actual walls because individuals are not able to see them. On the other hand, they stated that all cultures and beliefs have embedded prejudices about others who are perceived as different. However, they mentioned that it is possible to understand each other by showing commonalities or connection points. For example, P8 explained, "Stereotypes are generally engendered because of ignorance. When you get to know the other, you realize they are just humans like you". With the idea of building fences, participants introduced the need to set boundaries concerning personal spaces. Having boundaries and balance concerning interactions was referred to as a critical aspect to keep meaningfulness of interactions. Fences were framed as more flexible than walls, as they can be opened, moved, closed, and opened again. Also, fences represent a way of protecting an individual's personal space from being trespassed by others. Thus, the possibility of building fences supports individuals feeling safe in an unacquainted context rather than keeping constant separations as walls do.

4.1.2 Poem 2: Naked souls. The main topics discussed with this poem were vulnerability, impacts of IMSI, and intercultural communication. Participants explained naked souls as people sharing part of themselves, their true self, without the fear of being judged. For example, the author of the poem stated, "I'm talking about vulnerability in a positive sense when your soul can be naked in front of another person, and you know that another person is also getting naked in front of you, you reach that feeling of a connection that you would not have with other people if you don't share that much of yourself". Consequently, participants suggested that being

vulnerable simultaneously could facilitate an ordinary interaction becoming a meaningful one. In that sense, this interaction has a unique characteristic in trust-building when interacting.

Additionally, participants discussed various ways in which IMSI impacts individuals who are part of the interaction. They suggested that by being engaged in IMSI, they continue to reshape themselves and their characteristics by going out of their comfort zones. They referred to comfort zones and safe spaces (physical or mental) where individuals feel so comfortable that they refrain from having new experiences. Therefore, going out of the comfort zone was described as facilitating both self-discovery and sharing meaningful moments.

4.1.3 Poem 3: Times of despair and starry nights. The main topics discussed with this poem were loneliness and human (dis)connections. Participants explained the times of despair idea referring to feelings of loneliness, being unseen and unheard. The poem introduced a conversation about why people do not approach others when they want to. On the one hand, there are personal constraints, for example, being shy or feeling judged, and social constraints as unspoken social rules hindering the desire to approach people around.

Participants explained the starry night metaphor as reflecting about humans resembling constellations. They mentioned that humans can be as connected as the stars in the sky, forming patterns, close still not directly one entity. However, it is possible to find patterns and touchpoints among humans just as they can find among stars. They explained that these connections were personal life experiences, which allowed them to exchange their stories, life lessons, and emotions.

4.2 Lessons on IMSI: factors that influence IMSI

While participants discussed the poems concerning their previous experiences, they also mentioned distinct aspects of interpersonal contact that seem to promote IMSI or restrain them from being part of IMSI. These aspects are previous experiences, individual traits and preferences, personal space, language differences, known and unknown biases, and unspoken social rules.

4.2.1 Previous experiences. As previous experiences influence present and future interactions, there seems to be a difference between positive, negative, and pleasant or unpleasant interactions. The participants perceived positive interactions, both pleasant and unpleasant, as meaningful. On the one hand, pleasant meaningful interactions boost people's satisfaction, which motivates them to have more interactions like this in the future. On the other hand, through unpleasant IMSI, even though these can be uncomfortable situations, participants explain they could still extract a lesson which, in the end, makes the interaction positive. However, negative experiences might make people reluctant to engage in new interactions, fearing something negative could happen again. For example, as stated by P10, "I think you should be confronted with certain (difficult) situations. I think this is very important and it's going to shape you".

Consequently, a positive interaction could make contact points more plausible, reinforcing the possibility of getting engaged in

positive interactions in the future; a negative experience could decrease the openness to interact. For example, P9 expressed concern about meeting some people that could negatively influence her behavior "sometimes we meet people, and they are very good, but somehow, we meet others, and we can become bad people because of them. I do not know how we can know the point that we need to open or close the wall to others".

4.2.2 Individual's traits and preferences. During the focus group, participants reflected on their individual preferences about IMSI. They connected their characteristics to the way and to the extent they wish to interact with others. These characteristics were the level of extraversion, openness to new experiences, and shyness. While participants identified themselves as more extroverted expressed the need for the excitement of meeting new people, participants that referred to themselves as more introverted were more concerned about their personal space, i.e., not being respected if another person tried to interact with them excessively. Moreover, they feared feeling overwhelmed, which could undermine a meaningful interaction and make it a negative experience. As an example, P1 said, "sometimes people approach me, and I'm like doing something or even just sitting thinking and then, they come and talk to me and ask things that are too personal, and it gets uncomfortable".

There were also two cases concerning openness (i.e., the extent people are open to new experiences). Some people might have concerns or fears about strangers and, in so, prefer to avoid social interactions, while others would look forward to having new experiences in their lives and meeting new people, even if just for a brief time to get a sense of excitement. P13, who defined herself as less open, stated, "I like to go places that are cozy and chill, homelike places, and I feel comfortable around my close friends (. . .) I always go to the same places because I know that I feel comfortable".

Finally, concerning the level of shyness, shyer people, even when wanting to interact, might not have the confidence to do so, fearing to be judged. In contrast, less shy people could approach others without thinking about being judged. However, P6, who defined herself as shyer, referred to an online interaction saying that "I was not shy at all in there because the internet gives you that confidence (. . .) it creates that line in between which makes it so easy [to interact]", hence explaining they can take part of IMSI with technological mediation.

4.2.3 Personal space. Participants stated that keeping a balanced composition of interactions is required to engage in new ones. Balance refers to maintaining the number of interactions, duration, and development according to their personal preferences to prevent feeling overconsumed (i.e., feeling like someone used all their time and attention). When feeling overconsumed, participants might be reluctant to engage in new interactions. For example, P5 mentioned, "I can think of amazing people that I met, but because I wanted to spend so much time with these people, all the time I could during the first days, then, after that ok, I didn't want to meet that person anymore". Thus, participants expressed it is crucial to have a personal space that cannot be trespassed. They agreed on the need to understand themselves concerning the kinds of interactions they wish to be engaged in to maintain the meaningfulness of some interactions. While having a clearly defined personal space seemed to be a requirement for IMSI, creating a shared space where

individuals can be vulnerable to share themselves could promote IMSI. As participants mentioned, IMSI gives them a space for being vulnerable and trusting each other while interacting, creating a shared space of closeness and non-judgment.

4.2.4 Language differences. Language differences are a barrier to social inclusion [83, 88], as not speaking the same language makes it difficult for interactions to start in the first place. Even if someone knows another language, as stated by the Turkish-speaking participants, sometimes they have concerns about the idea of poor performance and shy away from the interaction. However, participants also indicated that language does not always hinder IMSI. For example, though eight participants had a mother tongue different from Turkish, this has not directly translated into not having IMSI with locals. For example, P15 mentioned one IMSI he had “I was sitting in a park, an old guy came to me, he doesn’t speak English at all, he offered me tea with a cigarette, we just sit, look [at] each other with a smile, but we didn’t talk [about] anything because he doesn’t speak [English]”. Thus, communication is perceived more broadly than language, and participants find their way around this barrier. Furthermore, participants stated that spoken language could even create differences among people from the same country. For example, having different accents can influence interactions as well by triggering biases. Therefore, participants can communicate beyond oral language using body language, gestures, sound, glances, and drawings, which could be beneficial even within the same culture.

4.2.5 Known and unknown biases. All kinds of pre-made ideas about people represent a big challenge for interaction as they can create division. As stated by P7 referring to Poem 1, “she embodied prejudices as bricks, and I think this is very relevant because we don’t need [real] walls to separate you from each other, but your prejudices separate you, just as bricks would do, way stronger.” Or, as P8 said, “They [prejudices] are more dangerous [than walls] because we don’t see prejudices. And sometimes, a person is building up a wall and is not aware of that. But a wall of bricks, you can see it”. Consequently, these comments explain that not only having biases but also being unaware of these biases hinders IMSI. Participants considered unknown biases even more alarming because people act on them without realizing them.

4.2.6 Unspoken social rules. Another factor that may hinder social interactions is manners understood as appropriate ways of approaching others and the unspoken rules about interactions according to places and cultures. For example, P1 explained, “*when you go to a café there are so many people, and sometimes, I just want to talk to the people, I just want to go there and be like hey you’re alone, I’m alone let’s start a conversation, but I feel like there’s something that doesn’t allow you to talk to these people.*” This idea is directly connected to the conventional ways to approach someone in a coffee shop or a street. When explaining these ways, the participants felt they could be bothering the other or judged by the other. Moreover, they elaborated on each culture having its own rituals and ways of doing (e.g., how to greet and talk to strangers) that migrants need to learn when they relocate to a new place. Still, understanding what is culturally appropriate might be difficult, and they might refrain from some interactions due to fear of being unwelcome or judged. Hence, participants stated that they often

seek a reason to start an interaction, either an activity or asking for directions, or something afforded by the environment, as could be tickets-to-talk [71].

5 TOWARDS FACILITATING INTERCULTURAL MEANINGFUL SOCIAL INTERACTIONS

This study explored how IMSI are perceived and experienced from a participant’s standpoint. In this section, we present and discuss a participant-driven characterization of IMSI by referring to the factors influencing them and the impact of IMSI on individuals. Then, we introduce design opportunities for facilitating IMSI in public places.

5.1 Unpacking IMSI

We have found three conditions of IMSI. First, they are interactions held with someone perceived as from a different culture, mainly understood as someone from another nationality by the participants. However, in some cases, they can also involve people from the same country and other regions or different social groups (e.g., conservative people and modern people; youngsters and older people). Second, IMSIs are memorable interactions characterized by a special event that emphasizes them from the hundreds of regular interactions people have daily. And third, they should have a positive impact on participants in different ways, including:

Developing self-knowledge. Through IMSI based on intercultural exchanges and perspective sharing, participants can learn something about another person’s life, experiences, or culture to start a self-reflection process after the interaction, developing a better understanding of the self. For example, P10 expressed that IMSI allows individuals to learn from each other’s perspectives to create their own.

Creating ties. Participants can create ties through IMSI based on finding unexpected similarities between them and unacquainted others. For instance, different participants explained how they could develop bonds and even friendships with strangers by discovering common life experiences, preferences, or interests.

Building trust. Through IMSI based on performing new activities together (i.e., expanding comfort zone), participants allow themselves to be vulnerable and support each other in the experience, which impacts by building trust in each other. For instance, P4 expressed that meeting someone while doing something out of their comfort zone created unique connections they would not develop otherwise.

Spreading joy. Through IMSI based on sharing pleasant moments, participants can enjoy some moments of glee during the day through short interactions and connections with others under the stress of everyday activities, therefore spreading joy. For example, in the focus group, P13 shared a story in which she was picking up plastic bags, and another person started helping and smiling at her, and those actions made the interaction meaningful for her due to feeling joy.

Promoting kindness. Participants can promote kindness and hope in society through IMSI based on helping each other and exchanging small favors. For example, P6 narrated a situation in which she was lost, asked for help, and a woman gave her the

Table 1: Factors influencing IMSI, impacts of IMSI, and opportunities for facilitating IMSI in public places

Factors Influencing IMSI	Impacts	Design Opportunities
Previous experiences	Developing self-knowledge	Understanding and testing prejudices
Individual traits and preferences	Creating ties	Supporting and maintaining boundaries
Personal space	Building trust	Managing vulnerability
Language barriers	Spreading joy	Transforming barriers into meaningful connections
Known and unknown biases	Promoting kindness	
Unspoken social rules		

directions and further started a deeper conversation on which she felt like that stranger really cared for her.

5.2 Design opportunities for promoting IMSI

Awareness of the aforementioned conditions (i.e., held with an intercultural other, being memorable, and being impactful) could help designers better understand IMSI. To further support this awareness, in the next section, we present four potential areas to encourage designers and researchers to explore various ways of facilitating them. With the findings of this study, we have been able to identify a set of design opportunities through which design and technology could enable IMSI in public places.

5.2.1 Understanding and testing prejudices. The metaphor of breaking walls explained that prejudices could exist among individuals in intercultural contexts and that they are barely noticeable. Through the discussion, participants explained it is necessary to make prejudices evident and break them down by informing people, fighting the lack of knowledge they are built on. Therefore, an opportunity here is to intervene in public places, so people identify and understand their prejudices, and through self-reflection, evaluate whether they are positively contributing to their lives or preventing them from exploring various aspects of the world. As participants shared previous IMSI in museums in Istanbul, to make an example case, one could think about igniting this process by having interactive exhibitions that fight fake perspectives and fake news about other cultures by engaging people from those cultures to curate and share information on beliefs, values, or traditions of such cultures or give tours in the museum.

5.2.2 Supporting and maintaining boundaries. During the focus group, participants emphasized the need to set and keep boundaries about their social interactions to continue to engage in IMSI in the future and maintain the meaningfulness of their interactions.

First, they explained that sometimes they have trouble understanding where to put the fence, which is understanding when to start, continue, avoid, or finish an interaction with someone. Hence, there is an opportunity to support participants in understanding their boundaries. For example, participants expressed sometimes they feel uncomfortable while interacting but cannot understand why. Thus, to make a case, one could collect and visualize data about individuals' social interactions to reflect on their interaction process and preferences. In today's context, where people constantly collect data about physical activity, digital activities, and food consumption, tracking social data is not irrational. Moreover, monitoring interactions and physiological reactions to these interactions to

visualize them on a personal device (e.g., a bright necklace that collects data about social interactions and visualizes the interaction intention of a person via color change) can help people self-reflect on their behaviors, identifying patterns about their interactions.

Second, participants sometimes struggle to express themselves when they do not wish to start or continue an interaction because it makes them uncomfortable. Therefore, there is an opportunity to support fences that open when someone is open to interacting and close when interactions are not preferred, avoiding static walls between them and others. Hence, future work could consider how spatial design could express these fences tangibly (e.g., a smart bench emitting orange light when the participant does not want to interact) and whether we can move the fences further by respecting people's boundaries.

5.2.3 Managing vulnerability. Participants also mentioned needing to feel free to show their naked souls, including previous experiences, life stories, feelings, and personal characteristics, to be engaged in IMSI. However, they sometimes hide these aspects, thus representing an intangible fence. There is an opportunity for design to help people own their vulnerabilities. Therefore, we could think of ways to ease sharing individuals' vulnerabilities to connect with others safely and normalize certain aspects of themselves they should not be ashamed of, such as their nationality, migration status, or personal characteristics. For instance, as IMSI can be held by finding similarities, public places could be designed to accept people's vulnerabilities and share the challenges they live with others through sounds, thoughts, or digital gifts. Then, others could collect them while transiting through those places (e.g., a mobile AR app integrated into an urban park map), igniting and continuing the interaction.

On the other hand, some participants argued that sometimes the kind of interactions do not adapt to their personality, for example, when being shy. So, IMSI might require designers to consider participants' traits, language, and other individual characteristics beyond what personas have currently explored. Furthermore, there could be an opportunity for public places and services to adapt to participants and allow them to interact according to their characteristics. Some participants who considered themselves shy suggested IMSI could be held through technology. Therefore, one could think of diverse ways to connect people in a hybrid manner. First, sharing something in the digital space (e.g., the digital twin of a city in the Metaverse). And, after developing digital bonds, they could be asked to meet in person accordingly.

5.2.4 Transforming barriers into meaningful connections. Language barriers, biases, and unspoken social rules could negatively influence IMSI. However, as mentioned by the participants, these might also work to connect people when they learn about each other, find similarities, or expand their comfort zone. For example, some participants have had experiences of IMSI without speaking the same language, such as a migrant drinking tea with a Turkish senior who does not speak English in a park. Thus, public places could use other means of communication, like body language, smiles, or glances for meaningfully connecting if creating more spaces to meet intercultural strangers while getting a reward as tea in the example.

Biases are a complex challenge for interactions, touching upon different aspects of an individual's identity. Still, some of the characteristics an individual can be discriminated against connect them with others experiencing the same, and in so, these situations might represent a way of creating bonds, even with strangers. One could think about how public places that are usually associated with a stereotype could be used against the stereotype. As participants shared IMSI being held in public parks and squares, one could think about turning public squares where residents find various fitness tools into body-positive places instead of places that judge people by their looks. Different people who have felt judged before for their bodies could meet there and perform activities together, finding a new group of people to connect with, with similar experiences beyond their migration status and culture.

Finally, participants mentioned that every culture has its own accepted ways of doing things. These aspects can make an individual more similar, thus accepted, or too different, and rejected. However, individuals do not necessarily know those norms when arriving in a new country. Thus, it can be challenging to interact with others when they do not know how to start that interaction in the first place. Hence, there is an opportunity for technologies to support individuals in overcoming unspoken social rules, facilitate and guide IMSI and even simply inform about the culture (e.g., a digital tourist guide hinting about the rules according to different city zones). It is up to individuals to evaluate if they comply with those.

We note that the examples presented here might have ethical implications (e.g., sharing sensitive information, placing all responsibility of interactions in technologies). We exhibit these ideas for illustrative purposes; they represent things that could be done, not what should be done, not necessarily what participants want to do. It is needed to continue working to build ideas with participants in the future. It is relevant to find ways to overcome such ethical limitations to propose public technologies that are safe, respectful of diversities, and include plural perspectives and voices of participants.

6 FINAL REFLECTIONS

6.1 Interactions and Intra-actions

We have introduced four opportunities for facilitating IMSI in public places. Some of these opportunities frame the need to work on an external level to create chances for interaction, while some work on an internal level as an individual's preparation for interactions (e.g., evaluating their prejudices, understanding their boundaries).

We have observed that preparation involves individuals interacting with themselves or intra-acting. We use this term slightly differently from how the feminist scholar Karen Barad [8] first coined it. We refer to how individuals inquire about themselves and their differences with others to shape and reshape themselves and perceived differences. For example, people develop an understanding of their own prejudices and personal boundaries. These intra-actions seem essential to interact with others meaningfully. Even though intra-actions are performed on a personal level, public places could still support these reflections by giving opportunities to intra-act and interact because these are the spaces where individuals can contrast their biases with real experiences.

6.2 The personal space, the social space, and the meaningful space

We have found that IMSI are interactions that meet three characteristics: (1) they are held with someone considered culturally different, (2) they are memorable, and (3) they ignited at least one of the impacts presented above. Additionally, these interactions require feeling comfortable and trusting enough to be vulnerable and share something individuals would generally hide. Further, these interactions are mobile within public places. In a city like Istanbul, individuals have hundreds of interactions a day; only some of those are memorable and impactful as to be meaningful. Hence, we believe these characteristics create a specific environment where IMSI is held. Meaningful spaces seem to go beyond contact zones [6] as social spaces where diverse cultural groups interact, since merely building connections between people's personal spaces or being in the same social space does not necessarily translate into IMSI. Furthermore, we add to the literature on meaningful places [5, 57, 91], which proposes meaningfulness as an attachment characteristic towards places. Here, we suggest meaningful spaces as the environments where IMSI are held, which might suppose distinctive features in comparison to other spaces; for instance, meaningful spaces do not necessarily refer to physical places, but the emotional and relational environment that allows participants to share something deeper about themselves, be vulnerable, trusted, and create that memorable connection. As IMSI are mobile, facilitating IMSI involves creating opportunities for people to meet in meaningful spaces that are sporadically created while interacting. Consequently, considering the factors and opportunities presented in this study, researchers could explore how public places could be reframed for people to feel comfortable, empathic, equal, and safe.

6.3 Creating the connections in place and time

The avoidance of interactions due to prejudices is a wicked problem [19]. Thus, there is no single successful solution. It requires a systemic intervention approach as a complex issue that interconnects social, cultural, and spatial matters. Considering Istanbul's historically multicultural and super-diverse characteristics along with the rush of life proper of a metropolis and the in-between east and west location, which makes it a relevant space for understanding IMSI, we believe there is a need to continue to develop interventions for facilitating this interaction in various ways. IMSI cannot be left to chance as social inclusion cannot be left to chance. Hence, it requires building public infrastructure around it that considers the

variety of IMSI and factors that influence them. Interventions can include municipality projects around spatial design, public services, embedded technologies to ubiquitous technologies, or even artifacts that facilitate IMSI developed by designers, researchers, local communities, and the general public.

Since Istanbul's public sphere, like many eastern and western metropolises, has consistently integrated more technologies [74], future work could explore the social aspects of these smart cities. Therefore, new projects could investigate extending IMSI possibilities in frequency, kind, and engagement. Inspired by our participants' diverse experiences around IMSI, we envision a socially smart Istanbul, where different public places generate opportunities to meaningfully connect with a plural understanding of cultures and diversities coexisting. Furthermore, with the optimization features proper of a smart city, a socially smart Istanbul could collect data to redesign its own public places according to participants' experiences and become more empathic, safe, and meaningful.

6.4 Reflections on the method

This study applied an arts-based approach to capture participants' experiences, thoughts, beliefs, and feelings about their intercultural social interactions. Specifically, we used poems to communicate and discuss abstract ideas in metaphors. The poems opened a space to help and advise others according to their personal experiences. The poems were, in the end, an excuse to abstractly discuss what they were going through in their lives. Using poems as props is highly interesting for us as researchers since it frames poetry as a more democratic material than an art form that only some enlightened people can produce and understand. Participants did not need previous knowledge to attend the session and talk about the poems.

Before the focus group, analyzing seemed like a challenge because we expected high abstraction and subjectivity of the poems. However, as the participants' discussion was deep and long, we did not need to interpret the poems ourselves; we just focused on analyzing the discussion following each poem reading. Hence, it seemed appropriate to capture the participant's situated knowledge [20].

6.4.1 Limitations of this work. There are aspects limiting our study [85]; for example, participants' composition is not representative of all migrants and locals in Istanbul (e.g., participants were young adults, and two were teenagers, five of them were university students, two were high school students). Further, all participants needed a basic level of English to attend as this was the bridging language between all the participants. Therefore, findings cannot be generalizable to all external migrants in all countries, and our findings are contextual. However, our goal is not to extract generalizable findings as much as it is to make visible participants' experiences, understand their perspectives [20], and what that knowledge tells us about intercultural meaningful social interactions.

7 CONCLUSION

Interactions between intercultural strangers are often avoided due to biases and stereotypes between intercultural groups, like immigrants and nationals. Engaging in positive and meaningful interactions is critical to promoting social inclusion in these contexts.

As public places represent the space where people often contact different social and cultural groups, we explored how IMSI could be facilitated in public places of Istanbul, in a super-diverse city in-between east and west. We conducted a focus group with a group of 15 participants composed of migrants and locals living in Istanbul. We captured participants' experiences, feelings, and thoughts about IMSI using poems as a discussion trigger. We have introduced factors that influence IMSI, besides proposing a characterization of IMSI and design opportunities to facilitate them in public places of Istanbul. Further, we discussed the relevance of these opportunities to transform individual spaces into meaningful ones. We expect these opportunities to inspire new explorations for developing public places as spaces where people from diverse cultural and social backgrounds connect meaningfully.

REFERENCES

- [1] Safaa Abujarour and Hanna Krasnova. 2018. E-Learning as a Means of Social Inclusion: The Case of Syrian Refugees in Germany Abstract. In *Twenty-fourth Americas Conference on Information Systems, New Orleans, 2018*.
- [2] Ash Amin. 2002. Ethnicity and the multicultural city: living with diversity. 34, (2002), 959–980. DOI:https://doi.org/10.1068/a3537
- [3] Bustamante Ana María Duarte, Nina Brendel, Auriol Degbelo, and Christian Kray. 2018. Participatory Design and Participatory Research: An HCI Case Study with Young Forced Migrants. 25, 1 (2018), 1–39.
- [4] Marisol Wong-villacres Arkadeep, Kumar Aditya, and Politecnica Litoral. 2018. Designing for Intersections. (2018), 45–58.
- [5] Kye Askins. 2016. Emotional citizenry: everyday geographies of befriending, belonging and intercultural encounter. *Trans. Inst. Br. Geogr.* 41, 4 (2016), 515–527. DOI:https://doi.org/10.1111/tran.12135
- [6] Kye Askins and Rachel Pain. 2011. Contact zones: Participation, materiality, and the messiness of interaction. *Environ. Plan. D Soc. Sp.* 29, 5 (2011), 803–821. DOI:https://doi.org/10.1068/d11109
- [7] Javed Atif and Aziz Alghunaim. 2019. Tarjimly.
- [8] Karen Barad. 2007. Meeting the universe halfway. In *Meeting the universe halfway*.
- [9] Shaowen Bardzell and Jeffrey Bardzell. 2011. Towards a feminist HCI methodology: Social science, feminism, and HCI. *Conf. Hum. Factors Comput. Syst. - Proc.* (2011), 675–684. DOI:https://doi.org/10.1145/1978942.1979041
- [10] Anette Bengts, Susanne Hägglund, Annika Wiklund-Engblom, Joachim Majors, and Anas Ashfaq. 2018. Designing for social inclusion of immigrant women: the case of TeaTime. *Innovation* 31, 2 (2018), 106–124. DOI:https://doi.org/10.1080/13511610.2017.1348931
- [11] Kristen Sarah Biehl. 2020. A dwelling lens: migration, diversity and boundary-making in an Istanbul neighbourhood. *Ethn. Racial Stud.* 43, 12 (2020), 2236–2254.
- [12] Igor Bizjak, Robert Klinc, and Ziga Turk. 2017. A framework for open and participatory designing of built environments. *Comput. Environ. Urban Syst.* 66, (2017), 65–82. DOI:https://doi.org/10.1016/j.compenurbysys.2017.08.002
- [13] Liz Owens Boltz, Danah Henriksen, and Punya Mishra. 2015. Rethinking Technology & Creativity in the 21st Century: Empathy through Gaming – Perspective Taking in a Complex World. November (2015). DOI:https://doi.org/10.1007/s11528-015-0895-1
- [14] Virginia Braun and Victoria Clarke. 2019. Reflecting on reflexive thematic analysis. *Qual. Res. Sport. Exerc. Heal.* 11, 4 (2019), 589–597.
- [15] Virginia Braun and Victoria Clarke. 2020. One size fits all? What counts as quality practice in (reflexive) thematic analysis? *Qual. Res. Psychol.* (2020), 1–25.
- [16] Kelly T Brewer and H Deniz Yükeker. 2006. A survey on African migrants and asylum seekers in Istanbul. Migration Research Program at the Koç University.
- [17] Alice V Brown and Jaz Hee-jeong Choi. 2018. Refugee and the post-trauma journeys in the fuzzy front end of co-creative practices. In *Proceedings of the 15th Participatory Design Conference: Full Papers-Volume 1*, 15.
- [18] Rupert Brown and Miles Hewstone. 2005. An integrative theory of intergroup contact. *Adv. Exp. Soc. Psychol.* 37, (January 2005), 255–343. DOI:https://doi.org/10.1016/S0065-2601(05)37005-5
- [19] Richard Buchanan. 2017. Wicked Problems in Design Thinking. *Des. Crit. Prim. Sources* 8, 2 (2017), 5–21. DOI:https://doi.org/10.5040/9781474282932.0019
- [20] Pablo Calderon Salazar and Liesbeth Huybrechts. 2020. PD otherwise will be pluriversal (or it won't be). *ACM Int. Conf. Proceeding Ser.* 1, (2020), 107–115. DOI:https://doi.org/10.1145/3385010.3385027
- [21] Seong-Hoon Cho, Dayton M Lambert, Seung Gyu Kim, Roland K Roberts, and William M Park. 2011. Relationship between value of open space and distance from housing locations within a community. *J. Geogr. Syst.* 13, 4 (2011), 393–414.
- [22] Rachel Clarke, Jo Briggs, Ann Light, and Peter Wright. 2019. Situated Encounters with Socially Engaged Art in Community-Based Design. *ACM Int. Conf.*

- Proceeding Ser.* 34, 3 (2019), 81–91. DOI:https://doi.org/10.1145/3328320.3328386
- [23] Marwa Dabaieh and Jonas Alwall. 2018. Building now and building back. Refugees at the centre of an occupant driven design and construction process. *Sustain. cities Soc.* 37, (2018), 619–627.
 - [24] Antonella Delle Fave, Ingrid Brdar, Teresa Freire, Dianne Vella-Brodrick, and Marié P Wissing. 2011. The eudaimonic and hedonic components of happiness: Qualitative and quantitative findings. *Soc. Indic. Res.* 100, 2 (2011), 185–207.
 - [25] T Djajadiningrat, L Feijs, J Hu, S Kyffin, and L Rampino. 2020. Poetry in design. October 2015 (2020), 48–56.
 - [26] Jane Fedorowicz, Sebastain Olbrich, Chee-wee Tan, and Cathy Urquhart. 2016. Leveraging Technology for Refugee Integration: How Can We Help? *Proc. 37th Int. Conf. Inf. Syst.* December (2016), 1–6.
 - [27] Karen E Fisher, Ann Peterson Bishop, Lassana Magassa, and Phil Fawcett. 2014. Action! codesigning interactive technology with immigrant teens. In *Proceedings of the 2014 conference on Interaction Design and Children*, 345–348.
 - [28] Xavier Fonseca, Geertje Slingerland, Stephan Lukosch, and Frances Brazier. 2021. Designing for meaningful social interaction in digital serious games. *Entertain. Comput.* 36, January 2020 (2021), 100385. DOI:https://doi.org/10.1016/j.entcom.2020.100385
 - [29] John Friedmann. 2020. *Planning in the public domain: From knowledge to action*. Princeton University Press.
 - [30] Sandra M. Gifford and Raelene Wilding. 2013. Digital escapes? ICTs, settlement and belonging among karen youth in Melbourne, Australia. *J. Refug. Stud.* 26, 4 (2013), 558–575. DOI:https://doi.org/10.1093/jrs/fet020
 - [31] Danilo Giglito, Caroline Claisse, Luigina Ciolli, and Eleanor Lockley. 2019. Bridging cultural heritage and communities through digital technologies: Understanding perspectives and challenges. *ACM Int. Conf. Proceeding Ser.* (2019), 81–91. DOI:https://doi.org/10.1145/3328320.3328386
 - [32] Erving Goffman. 2008. *Behavior in public places*. Simon and Schuster.
 - [33] Daniel Gooch, Matthew Barker, Lorraine Hudson, Ryan Kelly, Gerd Kortuem, Janet Van Der Linden, Marian Petre, Rebecca Brown, Anna Klis-Davies, Hannah Forbes, Jessica Mackinnon, Robbie Macpherson, and Clare Walton. 2018. Amplifying Quiet voices: Challenges and opportunities for participatory design at an urban scale. *ACM Trans. Comput. Interact.* 25, 1 (2018), 1–34. DOI:https://doi.org/10.1145/3139398
 - [34] Communities and Local Government. 2009. *Guidance on meaningful interaction*.
 - [35] Greater London Authority. 2018. *All of Us: The Mayor's Strategy for Social Integration*. Retrieved from https://www.london.gov.uk/sites/default/files/final_social_integration_strategy.pdf
 - [36] Barbara Grosse-Hering, Jon Mason, Dzmityr Aliakseyeu, Conny Bakker, and Pieter Desmet. 2013. Slow Design for Meaningful Interactions. In *Proceedings of the SIGCHI Conference on Human Factors in Computing Systems (CHI '13)*, Association for Computing Machinery, New York, NY, USA, 3431–3440. DOI:https://doi.org/10.1145/2470654.2466472
 - [37] Kim Halskov and Nicolai Brodersen Hansen. 2015. The diversity of participatory design research practice at PDC 2002-2012. *Int. J. Hum. Comput. Stud.* 74, (2015), 81–92. DOI:https://doi.org/10.1016/j.ijhcs.2014.09.003
 - [38] Donna Haraway. 1988. Situated Knowledges: The Science Question in Feminism and the Privilege of Partial Perspective Linked references are available on JSTOR for this article: *Fem. Stud.* 14, 3 (1988), 575–599.
 - [39] Nicholas Harney. 2013. Precarity, affect and problem solving with mobile phones by asylum seekers, refugees and migrants in Naples, Italy. *J. Refug. Stud.* 26, 4 (2013), 541–557. DOI:https://doi.org/10.1093/jrs/fet017
 - [40] Steve Harrison and Paul Dourish. 1996. Re-place-ing space. *Proc. 1996 ACM Conf. Comput. Support. Coop. Work - CSCW '96* 7, (1996), 67–76. DOI:https://doi.org/10.1145/240080.240193
 - [41] Steve Harrison and Paul Dourish. 1996. Re-place-ing space: the roles of place and space in collaborative systems. In *Proceedings of the 1996 ACM conference on Computer supported cooperative work*, 67–76.
 - [42] Marc Hassenzahl, Kai Eckoldt, Sarah Diefenbach, Matthias Laschke, Eva Len, and Joonhwan Kim. 2013. Designing moments of meaning and pleasure. Experience design and happiness. *Int. J. Des.* 7, 3 (2013).
 - [43] Luke Hespanhol, Hilary Davis, Joel Fredericks, Glenda Caldwell, and Marius Hoggenmüller. 2018. The Digital Fringe and Social Participation through Interaction Design. *J. Community Informatics* 14, 1 SE-Special Issue: Designing Participation for the Digital Fringe (2018), 4–16. Retrieved from <http://ci-journal.org/index.php/ciej/article/view/1451>
 - [44] Caroline Holland, Andrew Clark, Jeanne Katz, and Sheila Peace. 2007. *Social interactions in urban public places*. Policy Press.
 - [45] Eva Hornecker. 2005. A design theme for tangible interaction: embodied facilitation. In *ECSCW 2005*, 23–43.
 - [46] Eva Hornecker and Jacob Buur. 2006. Getting a Grip on Tangible Interaction: A Framework on Physical Space and Social Interaction. (2006), 437–446.
 - [47] Joey Chiao Yin Hsiao and Tawanna R. Dillahunt. 2018. Technology to support immigrant access to social capital and adaptation to a new country. *Proc. ACM Human-Computer Interact.* 2, CSCW (2018). DOI:https://doi.org/10.1145/3274339
 - [48] Jörn Hurtienne, Kerstin Klöckner, Sarah Diefenbach, Claudia Nass, and Andreas Maier. 2015. Designing with image schemas: Resolving the tension between innovation, inclusion and intuitive use. *Interact. Comput.* 27, 3 (2015), 235–255. DOI:https://doi.org/10.1093/iwc/iwu049
 - [49] Akram M Ijla. 2012. Does public space create social capital? *Int. J. Sociol. Anthropol.* 4, 2 (2012), 48–53.
 - [50] M. Sharon Jeannotte. 2008. Promoting Social Integration – A Brief Examination of Concepts and Issues. (2008), 1–15. Retrieved from http://www.un.org/esa/socdev/social/meetings/egm6_social_integration/documents/Jeanotte_Concepts.pdf
 - [51] Marina Jirotko and Joseph A Goguen. 1994. *Requirements engineering: social and technical issues*. Academic Press Professional, Inc.
 - [52] Victor Kaptelinin. 2018. Technology and the givens of existence: Toward an existential inquiry framework in HCI research. In *Proceedings of the 2018 CHI Conference on Human Factors in Computing Systems*, 1–14.
 - [53] Fariba Karimi, Mathieu Géois, Claudia Wagner, Philipp Singer, and Markus Strohmaier. 2018. Homophily influences ranking of minorities in social networks. *Sci. Rep.* 8, 1 (2018), 1–12.
 - [54] Max Krüger, Ana Bustamante Duarte, Anne Weibert, Konstantin Aal, Reem Talhouk, and Oussama Metatla. 2019. What is participation? Emerging challenges for participatory design in globalized conditions. *Interactions* 26, 3 (2019), 50–54. DOI:https://doi.org/10.1145/3319376
 - [55] George Lakoff and Mark Johnson. 2008. *Metaphors we live by*. University of Chicago press.
 - [56] Mark J Landau. 2016. *Conceptual metaphor in social psychology: The poetics of everyday life*. Routledge.
 - [57] Laura Lentini and Françoise Decortis. 2010. Space and places: When interacting with and in physical space becomes a meaningful experience. *Pers. Ubiquitous Comput.* 14, 5 (2010), 407–415. DOI:https://doi.org/10.1007/s00779-009-0267-y
 - [58] Amna Liaqat, Benett Axtell, Cosmin Munteanu, Intergenerational Cultural, Barriers In, and Immigrant Families. 2021. Participatory Design for Intergenerational Culture Exchange in Immigrant Families: How Collaborative Narration and Creation Fosters Democratic Engagement. 5, April (2021).
 - [59] Ann Light, Kate Howland, Tom Hamilton, and David A. Harley. 2017. The meaning of place in supporting sociality. *DIS 2017 - Proc. 2017 ACM Conf. Des. Interact. Syst.* 2, (2017), 1141–1152. DOI:https://doi.org/10.1145/3064663.3064728
 - [60] Eden Litt, Siyan Zhao, Robert Kraut, and Moira Burke. 2020. What Are Meaningful Social Interactions in Today's Media Landscape? A Cross-Cultural Survey. *Soc. Media + Soc.* 6, 3 (2020), 205630512094288. DOI:https://doi.org/10.1177/2056305120942888
 - [61] K A I Lukoff, Cissy Yu, Julie Kientz, and Alexis Hiniker. 2018. What Makes Smartphone Use Meaningful or Meaningless? 2, 1 (2018), 1–26.
 - [62] Carleen Maitland and Brian Tomaszewski. 2015. Promoting Participatory Community Building in Refugee Camps with Mapping Technology. (2015). DOI:https://doi.org/10.1145/2737856.2737883
 - [63] Patrizia Marti and E. B.(Ward) van der Houwen. 2019. Poetry as a cross-cultural analysis and sensitizing tool in design. *AI Soc.* 34, 3 (2019), 545–558. DOI:https://doi.org/10.1007/s00146-017-0721-8
 - [64] Marco Martiniello. 2004. How to combine integration and diversities: The challenge of an EU multicultural citizenship. (2004).
 - [65] Cathy McIlwaine. 2011. Super-diversity, multiculturalism, and integration: An overview of the Latin American population in London, UK. *Cross-Border Migr. among Lat. Am.* (2011), 93–117.
 - [66] Wellington Gomes de Medeiros. 2014. Meaningful Interaction with Products. 30, 3 (2014), 16–28. DOI:https://doi.org/10.1162/DESI
 - [67] Nishtha Mehrotra and Pradeep Yammiyavar. 2013. Facilitating Social Interaction in Public Space. In *International Conference on Intelligent Interactive Technologies and Multimedia*, 89–101.
 - [68] Nishtha Mehrotra and Pradeep Yammiyavar. 2013. Facilitating Social Interaction in Public Space. (2013), 89–90.
 - [69] Elisa D. Mekler and Kasper Hornbæk. 2019. A framework for the experience of meaning in human-computer interaction. *Conf. Hum. Factors Comput. Syst. - Proc.* (2019), 1–15. DOI:https://doi.org/10.1145/3290605.3300455
 - [70] Robb Mitchell and Thomas Olsson. 2017. Barriers for bridging interpersonal gaps: Three inspirational design patterns for increasing collocated social interaction. *ACM Int. Conf. Proceeding Ser. Part F1285*, (2017), 2–10. DOI:https://doi.org/10.1145/3083671.3083697
 - [71] Robb Mitchell and Thomas Olsson. 2019. Facilitating the first move: Exploring inspirational design patterns for aiding initiation of social encounters. *ACM Int. Conf. Proceeding Ser.* (2019), 283–294. DOI:https://doi.org/10.1145/3328320.3328396
 - [72] Celene Navarrete and Esperanza Huerta. 2006. A bridge home: The use of the Internet by transnational communities of immigrants. *Proc. Annu. Hawaii Int. Conf. Syst. Sci.* 6, February 2006 (2006). DOI:https://doi.org/10.1109/HICSS.2006.3
 - [73] Christina Oelgemöller. 2011. 'Transit' and 'suspension': Migration management or the metamorphosis of asylum-seekers into 'illegal' immigrants. *J. Ethn. Migr. Stud.* 37, 3 (2011), 407–424.
 - [74] Susanna Paasovaara, Ekaterina Olshannikova, Pradthana Jarusriboonchai, Aris Malapaschas, and Thomas Olsson. 2016. Next2You: A proximity-based social application aiming to encourage interaction between nearby people. *ACM Int. Conf. Proceeding Ser.* (2016), 81–90. DOI:https://doi.org/10.1145/3012709.3012742

- [75] John Parkinson. 2012. *Democracy and public space: The physical sites of democratic performance*. Oxford University Press.
- [76] Quentin Stevens Patricia Aelbrecht. 2019. *Public Space Design and Social Cohesion An International Comparison*.
- [77] Thomas F Pettigrew, Linda R Tropp, Ulrich Wagner, and Oliver Christ. 2011. Recent advances in intergroup contact theory. *Int. J. Intercult. relations* 35, 3 (2011), 271–280.
- [78] Mary Louise Pratt. 2007. *Imperial eyes: Travel writing and transculturation*. routledge.
- [79] Robert D Putnam. 1995. Tuning in, tuning out: The strange disappearance of social capital in America. *PS Polit. Sci. Polit.* 28, 4 (1995), 664–684.
- [80] María Laura Ramírez Galleguillos and Aykut Coşkun. 2020. How Do I Matter? A Review of the Participatory Design Practice with Less Privileged Participants. In *Proceedings of the 16th Participatory Design Conference 2020 - Participation(s) Otherwise - Volume 1* (PDC '20), Association for Computing Machinery, Manizales, Colombia, 137–147. DOI:https://doi.org/10.1145/3385010.3385018
- [81] María Laura Ramírez Galleguillos, Aya Eloiriachi, Büşra Serdar, and Aykut Coşkun. Tell Me Your Story, I'll Tell You What Makes It Meaningful: Characterization of Meaningful Social Interactions Between Intercultural Strangers and Design Considerations for Promoting Them. 1–21.
- [82] María Laura Ramírez Galleguillos, Ece Sekerli, and Aykut Coskun. 2019. Ignite, Share and Reflect: Design Tactics to Foster Social Interactions Between Migrants and Locals in Istanbul. *Int. Assoc. Soc. Des. Res. Conf.* (2019).
- [83] Mariana Salgado and Michail Galanakis. 2014. "... so what?" - Limitations of participatory design on decision-making in urban planning. *ACM Int. Conf. Proceeding Ser.* 2, (2014), 5–8. DOI:https://doi.org/10.1145/2662155.2662177
- [84] Nitin Sawhney. 2009. Voices beyond walls: the role of digital storytelling for empowering marginalized youth in refugee camps. In *Proceedings of the 8th International Conference on Interaction Design and Children*, 302–305.
- [85] Seth J. Schwartz, Jennifer B. Unger, Byron L. Zamboanga, and José Szapocznik. 2010. Rethinking the concept of acculturation: Implications for theory and research. *Am. Psychol.* 65, 4 (2010), 237–251. DOI:https://doi.org/10.1037/a0019330
- [86] Joseph Seering and Geoff Kaufman. 2020. Metaphors in moderation. (2020). DOI:https://doi.org/10.1177/1461444820964968
- [87] Mark J Stern and Susan C Seifert. 2010. Arts-Based Social Inclusion and Immigrant Communities Social Impact of the Arts Project Arts-Based Social Inclusion: An Investigation of Existing Assets and Innovative Strategies to Engage Immigrant Communities in Philadelphia. September (2010). Retrieved from http://repository.upenn.edu/siap_social_inclusion
- [88] Nicholas J. Stevens. 2016. Sociotechnical urbanism: new systems ergonomics perspectives on land use planning and urban design. *Theor. Issues Ergon. Sci.* 17, 4 (2016), 443–451. DOI:https://doi.org/10.1080/1463922X.2016.1143988
- [89] Nicole Tausch, Miles Hewstone, Jared B. Kenworthy, Charis Psaltis, Katharina Schmid, Jason R. Popan, Ed Cairns, and Joanne Hughes. 2010. Secondary transfer effects of intergroup contact: Alternative accounts and underlying processes. *J. Pers. Soc. Psychol.* 99, 2 (2010), 282–302. DOI:https://doi.org/10.1037/a0018553
- [90] IOM Turkey. 2021. Migrants' Presence Monitoring Flow Monitoring Compilation Report December 2021. 1–4. Retrieved January 17, 2022 from <https://turkey.iom.int/data-and-resources>
- [91] Norsidah Ujang, Marek Kozłowski, and Suhardi Maulan. 2018. Linking place attachment and social interaction: towards meaningful public places. *J. Place Manag. Dev.* 11, 1 (2018), 115–129. DOI:https://doi.org/10.1108/JPM-01-2017-0012
- [92] University of siegen and Appcom interactive. 2017. NETTWERKZEUG. Retrieved February 9, 2019 from <http://www.nett-werkzeug.de/en/>
- [93] Ayşen Üstübcü. 2019. The impact of externalized migration governance on Turkey: technocratic migration governance and the production of differentiated legal status. *Comp. Migr. Stud.* 7, 1 (2019), 46. DOI:https://doi.org/10.1186/s40878-019-0159-x
- [94] Gill Valentine. 2008. Living with difference: reflections on geographies of encounter. *Prog. Hum. Geogr.* 32, 3 (2008), 323–337.
- [95] Torben Wallbaum, Wilko Heuten, Matthias Esser, and Susanne Boll. 2016. Story-Box: Design of a system to support experience sharing through visual stories. *ACM Int. Conf. Proceeding Ser.* 23-27-Octo, (2016). DOI:https://doi.org/10.1145/2971485.2996732
- [96] Anne Weibert, Nora Oertel Ribeiro, Konstantin Aal, and Volker Wulf. 2017. "This is my story...": Storytelling with tangible artifacts among migrant women in Germany. *DIS 2017 Companion - Proc. 2017 ACM Conf. Des. Interact. Syst.* (2017), 144–149. DOI:https://doi.org/10.1145/3064857.3079135
- [97] World Summit for Social Development. 1995. Copenhagen Declaration on Social Development. March (1995), 1–19. Retrieved from <http://www.un-documents.net/cope-dec.htm%0A> <http://www.un.org/documents/ga/conf166/aconf166-9.htm>
- [98] Shuang Hong Yang, Bo Long, Alex Smola, Narayanan Sadagopan, Zhaohui Zheng, and Hongyuan Zha. 2011. Like like alike - Joint friendship and interest propagation in social networks. *Proc. 20th Int. Conf. World Wide Web, WWW 2011* (2011), 537–546. DOI:https://doi.org/10.1145/1963405.1963481