



First impressions and the built environment: exploring zero acquaintance judgments in socio-spatial contexts

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Abstract

The well-researched sociological concept known as Zero Acquaintance Judgment frames first impression scenarios and highlights their prevalence and importance to our everyday lives, yet sociology so far overlooks how these might be affected by the built environment where first impressions are typically situated. Broadly, spatial discriminatory discourse investigates how spaces can affect social judgments, yet no research has investigated how this dynamic might unfold within a first impression scenario. Using the Zero Acquaintance Judgment concept as a lens of inquiry, a comprehensive review of feminist, queer, racial, and disability frameworks (which comprise spatial discriminatory discourse) was undertaken. From this investigation, three broad theoretical themes were articulated and rationalized as to how the built environment can potentially affect first impressions between strangers. The discussion bears relevance for researchers and designers of spaces where first impressions are paramount to function as well as highlights how the settings of research into first impressions may affect outcomes.

Keywords Social judgment · Discrimination · Location · Belonging · Performative · Zero acquaintance judgment · Psychology · Sociology · Strangers

Introduction

First impressions significantly influence social interactions, yet the impact of the built environment on these judgments remains underexplored. This research investigates how physical settings, from urban zones to interior spaces, shape the initial perceptions we form about strangers. Using the sociological concept of Zero Acquaintance

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Judgment as an analytic lens, this article consolidates an exhaustive review of spatial discriminatory feminist, queer, racial, and disability discourses.

By highlighting the role of the built environment in shaping social judgments, this pioneering research offers new perspectives for spatial designers and sociologists. The article outlines the Zero Acquaintance Judgment concept including its existing links to the built environment, rationalizes the criteria for the review, and presents three emergent theoretical themes with robust discussion sections following for each. Finally, the article concludes with implications and questions for practice and research in psychology, sociology, and the built environment, emphasizing the importance of considering physical spaces as active contributors to the formation of first impressions.

Defining zero acquaintance judgments

Zero Acquaintance Judgment(s) (henceforth ZAJ) is a term used in sociology to frame the initial interpersonal judgments cast between strangers — in other words, first impressions. ZAJs are considered as occurring on a continuum of acquaintanceship; absolute zero could be the judgment of a person through a photograph, or when observing someone walking down a street, or engaging someone for a few minutes of brief conversation that does not surpass acquaintanceship (Gosling et al., 2009; Ambady and Rosenthal, 1992). ZAJs are made through static and expressive attributes; what we look like and how we act (Ambady et al., 2000) and are very common in everyday life. They are also more important than one may initially think, once a ZAJ is made by an observer it is hard to change and affects potential further social interactions (Dougherty et al., 1994). From good to bad, or on a continuum of value, people are judged in relation to labels that correlate to their perceived social value. In simple terms, how (dis)likable they are. Thus, a ZAJ may take many forms such as the description of intelligent, competent, helpful versus weak, stupid, selfish, but these are merely paraphrases for what level of (social) value is being assigned to the person(s) in question (Dubois & Beauvois, 2012). The ZAJ concept therefore frames our first impressions of others' value, allowing this abundant social phenomenon to be studied (Tooley, 2024).

The built environment and first impressions

Previous sociology studies have largely overlooked spatial relationships to ZAJs. Yet, it is conceivable that the built environment is an influential factor in such situations. For example, in meeting rooms, classrooms, shared housing scenarios, trains, coffee shops, waiting areas, bars, parklets, streets, or any other spatial typology where strangers interact for several seconds to minutes (Dougherty et al., 1994; Houser et al., 2007). While being acute encounters, ZAJ are arguably a significant phenomenon to consider in the context of the built environment, particularly within spatial discriminatory discourse, because they are ongoing situations that center around judgment and lay the foundations for future relations. At present, spatial discriminatory literature does not address first impressions directly but rather social judgment in a broad and holistic manner as related to the built environment — without the socio-

temporal constraint of a ZAJ scenario. Again, such a study would bear significance for researchers, but also designers of spaces where first impressions are prevalent and convivial interactions are of importance. Equally, an investigation as to how the built environment could affect ZAJ may be useful for sociologists and psychologists to recognize spaces more clearly as a variable within their research. For example, speed dating studies in a church could foreseeably differ from those in a bar.

Gosling, et al.'s *A Room with a Cue: Personality Judgments Based on Offices and Bedrooms* (2002) is one study that makes a direct connection between the ZAJ concept and the built environment. In this study, observers were briefly exposed to strangers' personal spaces and tasked to judge the occupant in question in a forensic crime scene manner, interpreting what the researchers describe as spatial "cues". These cues include such things as baseball bats, posters of political allegiances, a clean desk, aesthetic taste and so on. The judgments from these cues invited responses such as, "this person is well organized" (Gosling et al., 2002). Gosling et al.'s (2002) study highlights the potential adaptability of the concept of ZAJ into spatial discriminatory discourse, as a tool to explicitly frame how the built environment can facilitate initial interpersonal judgment among strangers.

Research on ZAJs has and continues to focus primarily on the accuracy of these initial impressions (Back & Vazire, 2012; Beer & Brooks, 2011; Beer & Watson, 2008; Bernieri et al., 1994; Blackman, 2002; Borkenau & Liebler, 1992; Borkenau et al., 2004; Carney et al., 2007; Kenny et al., 1994; Letzring et al., 2006). For instance, *The Social Psychology of Perceiving Others Accurately* (Back & Nestler, 2016), references Gosling et al.'s (2002) work, highlighting how judgments based on photographs of people include some environmental context. Similarly, *Teacher Judgment Accuracy at Zero-Acquaintance: A social accuracy analysis* (Bhowmik et al., 2017), considers the classroom as a backdrop when evaluating videos of teachers. This article diverges from these studies by shifting focus away from the accuracy of judgments. While Gosling et al.'s (2002) work also examines accuracy, it treats the built environment as the core variable in judgments, again, providing a foundation for this research to explore how physical spaces influence first impressions.

As sociology is yet to fully explore how space interacts with ZAJ, it was argued this initial research linking the two should be informed by spatial discourse, particularly where it is concerned with social judgment — this being discriminatory design discourse. While ZAJ are not confined to disenfranchised groups as the concept itself frames an any person-any person scenario, this article interrogates the several frameworks that comprise spatial discriminatory discourse; feminism, queer theory, racial theory and disability theory. The built environment is highlighted in each of these frameworks as discriminatory, in the sense that it directly discriminates against occupants — that is, its design does not always offer equality (for example, accessibility), and in the sense this can incite occupants to socially discriminate (judge) one another. The discourse within these frameworks is well-established and provides many amplified examples of how someone can be discriminated against through the built environment. However, in this article the author demonstrates how a ZAJ lens of inquiry reveals common themes that emerge relative to how discrimination can occur in everyday first impression scenarios (between anyone).

The sources are organized and discussed based on how they fit within the context of ZAJ, irrespective of their original discriminatory framework. This approach facilitates a clear extension of existing theories into the new context of ZAJ (this being the temporal, social and physical contexts of meeting strangers). Each review section identifies and extrapolates patterns from the discriminatory discourse, illustrating how these scenarios might unfold in any person-to-person situation. This method provides a structured review through the lens of ZAJ supporting the establishment of fundamental relationships between the built environment and first impressions. This structure also reveals the limitations of spatial discriminatory literature in addressing certain aspects of how Zero Acquaintance Judgments (ZAJ) are influenced by the built environment, as discussed in the conclusion.

The review investigated the literature through the following criteria; instances of social judgments; between, or foreseeably between strangers; as linked to space; that can occur rapidly (under several minutes). Approximately 100 sources were examined, the majority of which are listed in appendix 1, and roughly a third of these featured discussions that met the criteria. The sources were found using Google, Google Scholar, Web of Science, JSTOR, Taylor and Francis, Wiley, SAGE, and ProQuest. Almost all sources were peer reviewed, though three were written by well-published academics and activists for scholarly websites (Russell, 2022; Ryan, 2006; Sanders, 2017). Reasons sources did not meet the criteria and were therefore discarded, included a focus on placemaking (Beltran et al., 2015; Gehl, 1996; Long & Baran, 2011; Montgomery, 1998; Shaftoe, 2015), regulation (for example; Forsyth, 2001), philosophy (for example; Goffman, 1973, 2014) or organizational/workplace theory (for example; Raluca, 2012). Essentially these sources did not offer a clear avenue to extrapolate how the built environment affects interpersonal relations, often focussing on a direct environment-person relationship.

Through the review process, three recurrent themes emerged describing ways space can affect ZAJs;

1. Location-value-association: ZAJ are facilitated across the spectrum of physical division through the built environment (the Bronx versus 5th Avenue or the kitchen versus the restaurant). This is because spaces have a perceived social value to which their occupants can become rapidly associated. This association is static in nature, meaning the association is based on people's appearance.
2. Belonging-value-association: ZAJ are facilitated through ideas of belonging, where spaces symbolize the type of occupants that belong in them. People can rapidly perceive themselves and others to varying degrees of belonging (and therefore value) in relation to this type, which can affect ZAJ. Similar to the above, this idea of 'type' is limited to static appearances.
3. Performative-value-association: ZAJ are facilitated through ideas of behavior, where spaces symbolize the behaviors expected to be performed within them. People quickly assess themselves and others based on how well they fulfill these behaviors, which affects their perceived value and ZAJ.

The discussions following, explore how the study led to these three distinct spatial conceptualizations in relation to zero acquaintance judgments (ZAJ). It is impor-

tant to recognize that the provided examples may not universally apply across all geographical or political contexts or reflect contemporary societal norms. Instead, they demonstrate a fundamental connection between the built environment and its potential influence on initial impressions. This article primarily investigates how the built environment might interact with ZAJ without unpacking the origins of these dynamics, such as societal policies around race, gender, or homophobia that enforce segregation, or pre-existing biases individuals may have. These issues have been extensively explored within cultural geography (readers may look to the following authors, to name only a partial list; Richard Rothstein, Matthew Desmond, Diane Harris, Adrienne Brown, Doreen Massey, Jos Boys, Ann Heylighen, Kristina Wilson and Mabel Wilson). The focus here is strictly on the capacity of the built environment to influence judgments in situations where individuals may have no prior acquaintance or have cognizant knowledge of how extant societal constructs have resulted in people being (dis)placed across the built environment. Moreover, the contribution of certain frameworks to the development of themes varies, primarily due to their specific focus on certain groups (LGBTQ+ communities, racial minorities, women, people with disabilities). For instance, the racial framework tends to emphasize more static appearance examples, as opposed to behavioral, of how social judgments are influenced by the built environment. In contrast, the disability framework inherently revolves around the body's (ab)normality and its interaction with space.

Review

Location-value-association

Conceptualized from spatial discriminatory literature through the ZAJ concept, this location-value theme builds upon the understanding of how space affects first impressions provided by the sociological study conducted by Gosling et al. (2002); it associates the characteristics and subsequent value of spaces with their occupants. Examples include the botched and smelly slum (inadequately built and poorly maintained) facilitating judgments of the poor and historically the racial Other; how gay establishments were once areas of secrecy and became understood as reflections of the deviousness of queers and; the ornamental park folly versus the brothel indicating the morality and therefore value of women in proximity. Seminal architectural feminist Leslie Kanes Weisman's (1994, p. 9) words captures the location-value relationship more broadly before other examples are provided;

Buildings that spatially segregate or exclude... or relegate [people] to spaces in which they are either invisible or visibly subordinate, are the direct result of a comprehensive system of social oppression, not the consequence of failed architecture or prejudiced architects. However, our collective failure to notice and acknowledge how buildings are designed and used to support the social purposes they are meant to serve—including the maintenance of social inequality—guarantees that we will never do anything to change discriminatory design. When such an awareness does exist, discrimination can be redressed.

Throughout spatial discriminatory discourse the absence of a location can be associated with affecting ZAJ. Queer theorist David Usborne (Reed, 2003) moved to Los Angeles in the 1970's and noticed the almost total invisibility of gay life in the city. He speculated the considerable output of the gay press around that time had arisen to compensate for the illegibility of the streets. A concurrent scholarly study of the shuttered and camouflaged street facades and maze-like entries of queer venues concluded that these spaces incorporated and reflected certain characteristics of the gay community; secrecy and stigmatization (Reed, 2003). Queer theorist Betsky (1997) explains this lack of perceived location citing the rise of the middle class that created and dominated the built environment. Public squares, prisons, schools, and the like were all created for the nuclear family format (the heterosexual couple and their dependent children). This led to no place, or at least no legitimate place for homosexuals, especially since the practice of homosexuality has never been part of the way in which a society of this nuclear type regulated or reproduced itself (Betsky, 1997). Consequently, queers used the non-functional, hidden cracks of the urban, including parks, abandoned buildings, toilet blocks and so on and this meant, in-part, that they could not directly be associated with the value of a particular space or location.

Similar instances of location-absence can be noted during the colonial era when indigenous populations were considered as biologically and historically different to Europeans, some regarded as having no history at all as well as being biologically more animal than human (McGlade, 2017). As such, many indigenous populations were escorted away from colonial settlements into the nature to which they were seen to belong (Jervis, 2009). Later, outbreaks of disease were often blamed on the mixing of races which helped invoke the first legal paths to remove racial Others from city areas (Goldberg, 1993). These types of enforced relegations bear parallels to how queers were once banished into the non-spaces of society; both scenarios potentially inviting ZAJs of people in accordance with where they are, or rather at these more distant points in time, the lack of where they were (Tooley, 2021). Cultural geographer Massey (2018) taps into this location-absence dynamic by coining the phrase power-geometry, describing how people have varying mobility and value, some having the power to move across places (by choice), while others are effectively exiled from them.

Considering ZAJ of others can be based on places they inhabit, it is conceivable how a lack of value can be ascribed to anyone – regardless of marginalization – who have no place, or a place that is hidden away from society. One example could be how fly-in-fly-out workers may be regarded as unstable and greedy (Gardner et al., 2018) given they must frequently travel to extremely remote places to make a living, often for significant amounts of their time. More anecdotally, ‘sandgroper, rust belter, hay chewer and country bumpkin’ are some terms of derision to convey the value of others based on their remote location, regardless of demographic.

Of course, over time queers and racial Others have obtained location and therefore potential for associated value, however, vestiges of this type of location-absence-discrimination remain. In a more contemporary queer context queers are not wholly banished away in the non-functional cracks of society but in-part, are manifest in such places as the gay village. This is a double-edge-sword representing a societal shift; allowing queers to have their own location(s) rather than nothing (or conceptu-

ally non-existent space), yet this territory allows scrutiny from the exterior (Reed, 2003). The establishment of a socio-spatial boundary often constructs a counter position between ‘us and them’, regardless of scale or marginalization – for example, the division between the north and south of the USA and UK or the ‘good’ versus ‘bad’ part of town (Massey, 2018).

One example of how a queer place has been established leading to location-value associations is Chicago’s Boy’s Town. The city planners of Chicago addressed the gay community in the same way as they did an ethnicity (in the late 1990s); using gateways, pagodas and follies to represent Greek town, Chinatown, and Puerto Ricans (Sanders, 2003). At the inception of Boy’s Town, journalists and the community expressed their objections as they “did not wish to create another ghetto”, and others stated that they had “a problem in designating any areas for anything or anyone in particular” (Sanders, 2003). These comments highlight that even proposing to designate space for people invites social judgment from the outside in. When Boy’s Town was established comments such as “don’t do business in the north-end of area X, it’s a slum” were commonplace (Sanders, 2003). Such comments make explicit the linkage between spaces, their characteristics and value and the association to people within them — at zero acquaintance. This socio-spatial counter positioning occurs for queer spaces at a smaller scale in establishments like queer bookstores, cafes and bars (Bonnevier, 2007). For example, queer theorist Katarina Bonnevier describes how Café Copacabana in Stockholm was frequented by the lesbian community in 2003/4 for intellectual and social gatherings (Bonnevier, 2007). After being vandalized twice, it was firebombed and destroyed by two men who were arguably trying to deface and eliminate the location and its associated value for the patrons.

In 19th century USA, slums of overcrowded, dirty and dilapidated buildings became a foothold for the working class, immigrants and African Americans. Regardless of why the inhabitants were in these slums, be it potato famine, the lack of rights to fair pay or land ownership, to many, these spaces were irredeemable sites of degradation that indicated the failings of their inhabitants rather than their lack of resources or means. Journalist Allan Forman reflected common opinion in an 1888 issue of *American Magazine*, that slums were home to “a seething mass of humanity so ignorant, so vicious, so depraved that they hardly seem to belong to our species” (Brown, 2019).

As metropolises became increasingly mixed-race at the turn of the 20th century, segregation was maintained architecturally in two ways; through isolation and through architectural partitioning, resulting in location-value disparity (both not confined, yet particularly in the USA). Architectural isolation involved constructing places that kept whites and blacks apart and architectural partitioning involved racial segregation within facilities that were shared by the races. In the early 1900s Oklahoma mandated separate telephone booths for the races and separate train station waiting areas and Texas insisted that the venues for boxing and wrestling matches be for the exclusive use of a single race (Weyeneth, 2005). State governments were pressured to provide duplicate spaces for blacks and did so begrudgingly resulting in spaces that were never equal to the original (Weyeneth, 2005). Separate, smaller and less architecturally complex; waiting rooms, train cars, ticketing booths and seating areas in theaters, served to segregate people across locations even within the

same space, facilitating judgment from across sometimes intangible boundaries. For example, the least desirable space in a theater was the rear balcony as it was furthest from the showing and was referred to using various terms of derision, such as the buzzard's roost, crow's nest, and peanut gallery. (Weyeneth, 2005). These negative terms, regardless of racial intonation, associate a spatial zone and its aesthetic and cultural offerings with inhabitants; a roost or nest fit for an animal and the peanuts being often the only available snack to consume due to its low economic value.

In response to desegregation, spatial division and consequent location-value associations still manifested in the 1950s/1960s through the "projects" which were high rise urban solutions that promised decent living conditions to the lower classes. Due to previous historical segregations and circumstances, this largely meant racial Others. The projects became places of crime, social disorder, dirt and disease, teenage pregnancy, prostitution, drug use and unemployment (Goldberg, 1993). In short, they were boxes for the displaced marginalized to be contained. They had a generic image; box-like shapes, a standardized height range and materiality such as Bauhaus brick and concrete and were spatially dislocated from other areas of the city, resulting in them becoming symbolic beacons of low value. This ignorance could then be extended from the outside onto the people and personalities that occupied them and consequently they became places of such low value they were seen simply as places to avoid (if one had a choice) (Goldberg, 1993). These "solutions" to segregation show how ZAJs can occur while never having directly met the inhabitants of a space, instead, relying on cocktail-hour news reports and other media of spaces and their characteristics that suggest the characteristics and value of people who inhabit them (Goldberg, 1993).

These divisive typologies still exist in one form or another, despite racial relegation across the built environment in the western world being no longer permitted by law. Arguably, this has done little to remove division and subsequent racial-value association in the built environment; due to the constraints of generational poverty, access to both public and private spaces throughout the built environment becomes restricted. Thus, while the marginalized are permitted by law to access spaces generally, they are often not able to due to monetary pressures. While the racial Other are not necessarily confined to the box-like project spaces, associations between low-value spaces such as bad neighborhoods, overcrowded classrooms, emergency rooms and so on, are still prevalent (Goldberg, 1993). Furthermore, the racial Other and poor are held accountable for this perceived social disorder, again being judged at zero acquaintance, as if these negatively valued spaces are manifestations of them, rather than these spaces being considered as factors contributing to social problems. A more contemporary example of this can be found in South African architecture, which demonstrates wealth through European (white) architectural forms, as well as showcase forms of security to protect this wealth; four-meter-high fences inspired by ancient Greek or rural English design, with barbed wire on top, encourage both the symbolic physical separation of race and subsequent social value in accordance with which side of the fence someone is (Manning, 2004). While it is arguable that the majority of people – not all – on one side of the fence are of a particular race in this instance, this example demonstrates again that division serves to create spaces of contrasting value that is associated with occupants at zero acquaintance.

A parallel example where these spatial division and territory relationships could foreseeably sway ZAJ between non-marginalized groups involves the differentiation and segregation within professional environments, particularly in corporate office settings. Consider the spatial hierarchy observed in many large corporate buildings where some occupy expansive, well-furnished corner offices on higher floors with panoramic views, while others may be clustered in less desirable open-plan areas or positioned in smaller, windowless spaces or near utility areas like the mailroom or print stations (Vischer, 2007). A visitor in this type of space may easily deploy ZAJs in accordance with such divisions and their characteristics and associated value.

Discriminatory literature often suggests spaces that are exposed and public are perceived as masculine domains, in contrast to feminine spaces that are associated with the private, quiet and comfortable (Knox & Pinch, 2014; Spain, 2014). As gender critic Niculae Raluca suggests, the home is symbolic of the womb, it protects, grows and nurtures, it is a place of safety as opposed to the dangerous outside space appropriated by man with his role of providing food and money resources (Raluca, 2014). Thus, Raluca argues this delineates two distinct types of gendered spaces, “the interior and the exterior, the positive and the negative, the informal and the formal, the feminine and the masculine governed space” (Raluca, 2014). While women are arguably becoming less synonymized with the domestic in contemporary western society, the stigma of the home as one’s main place of occupation and its inherent contrast in value with the exterior remains (Massey, 2018). Anecdotally, this becomes evident in the stigma attached to house-husbands or the lack of value assigned to people who work from home rather in the city office (at least, pre-pandemic).

Continuing the idea of the built environment as a stage of adjacent levels of value, queer theorist Joel Sanders discusses recent design solutions for public restrooms that are “trans-inclusive” and how they provide a separate single occupancy room re-labeled/designated as Gender Neutral (Sanders, 2017). Sanders states this “single-occupancy solution spatially isolates and excludes; the adjacency stigmatizes non-conforming individuals, not only trans but also the disabled” (Sanders, 2017). Thus, when people do obtain location, even if it is immediately adjacent to the normative or valuable, this does not mean they accrue the same value as other people because the built environment stages what is valuable, foregrounding certain activities and spaces and people within them over others (Serlin, 2017). It is conceivable how people who inhabit foregrounding spaces could be judged at zero acquaintance more valuably than those occupying more backgrounded spaces.

Each of these examples demonstrate how people can judge and discriminate against one another at zero acquaintance in accordance with where they are. The idea of location-value-association occurs along a continuum of obviousness, from people being judged for having potentially no space, to people being judged for being in the same space yet a slightly different location within it (budget seats of a theater, for example). This suggests that however slight someone’s differential of location, it has the potential to affect ZAJ. Echoing the findings of Gosling et. al’s (2002) study, this first theme also describes how people can judge others purely through the built environment without ever having met — at absolute zero acquaintance. Regardless of race, gender, ability or sexuality, the discriminatory frameworks offer fundamental ideas of segregation, desegregation, division, isolation, exclusion, partitioning, fore-

grounding, backgrounding, and absence to articulate spatial causes for judgment. In the context of ZAJ these can be unified under the broad theme of location-value; how a location's perceived value can be rapidly associated with the people within.

Through this discussion, a series of theoretical propositions can be articulated;

- Spatial division, at any scale, produces a context that can incite ZAJ.
- Occupying foregrounded spaces, which are more prominent, may positively influence ZAJ.
- Occupying backgrounded spaces, which are less prominent (perhaps perceived as remote or inconsequential) may negatively impact ZAJ.
- The characteristics of spaces — whether they appear dirty, disorderly, secretive, small, or basic, versus grand, clean, and organized — have the potential to sway ZAJ through association.

Belonging-value-association

Conceptualized from spatial discriminatory literature through the ZAJ concept, this belonging-value theme outlines how spaces that facilitate people to share location (or seemingly should), still affect first impressions. This is because spaces can symbolize who belongs in them to varying degrees. Spaces that symbolize belonging can sometimes turn some people away before they enter since they may feel unwelcome, thereby perpetuating physical division and consequent location-value-associations (Lewis et al., 2011). For example, an anonymous source featured in Lewis et al.'s (2011) inquiry into the everyday lives of obese individuals explains how they did not want to use certain spaces due to resultant judgments cast upon them from onlookers, providing personal stories of contrasting the ergonomic proportions of some spaces. An apt metaphor for this belonging-value-association theme can be provided through the use of crime scene tape; although the tape is fragile and ephemeral and therefore easily bypassed for all, it denotes access to appropriate users (Steinfeld & Maisel, 2012). Other metaphors liken spaces to a social network with some areas considered reserved for specific activities and those associated with them (Massey, 2018). If someone is not seen as an appropriate user by onlookers, they can be considered a blemish or pollutant.

Weisman (1994) points out that because of someone's appearance, they may not be considered as standing in the same relationship to a space as others. Weisman (1994) posits that the built environment is similar to language and like the use of the words man and he which inherently refer to and above their feminine counterparts ("woman" and "she"), the built environment is an all-encompassing phenomenon for men over and above women. That is, architectural space reflects man as opposed to woman simply through ergonomic and symbolic attributes that are based around the virile body (Agest, 2003). Similar commentators argue that a Vitruvian framework still permeates architectural design; that architecture adheres to a system of ratios that establish parallelism between male parts and constructed elements (Raluca, 2014). With the general reflection of the male form in the built environment as a default architectural axis, it can be argued how building elements, ornament, styles, typolo-

gies, functions and spaces can be distinguished into binary opposites; masculine, traditionally represented through dominance, utilitarianism and strength, and feminine, stereotyped as softer, slender, decorative and nurturing (Raluca, 2014). It is also noted how transgender people naturally contrast the stability and firmness of architecture itself (including its binaries), since trans are at the heart of change and bend binaries and boundaries (Cavanagh, 2021). Cavanagh (2021) argues those that do not conform and dare to transgress gender dichotomies are viewed as pollutants, especially in areas such as bathroom typologies where hygiene is paramount. These binaries can therefore lead to power relations, ascribing value to those who seem to innately belong to a given space and vice versa. Beyond disenfranchised groups, this type of gender-belonging relationship could foreseeably apply to men in typically feminine spaces such as nail or waxing salons, tea rooms women's clothing stores, or more generally, places that are effeminate in aesthetic.

Parallel to feminist critiques of an over-riding masculine language of architecture, racial theorist Brown (2019) argues all architecture is inevitably racial architecture, producing and maintaining site-specific phenomenologies of race. She provides an example of using European design to influence the facades of downtown areas (over centuries) to avoid representing the United States' heterogenous population. Similarly, Christopher Cripps discusses the modernist movement's attempt to address these previous symbolic associations by being a universal language that superseded existing cultures and identities and replaced them with a machine-like functional utopia (Cripps, 2004). However, Cripps (2004) argues that the proportions, the use of technologies both in terms of implementation and construction, alongside modernist design's vestigial aesthetic relationship with Ancient Greek and Roman architecture, signifies Western culture and the associated whiteness, above all others. With this racial-cultural belonging relationship in mind, it could also be claimed that those with euro-Christian heritage might seem less belonging in social justice spaces that host marginalized groups, and ethnic centers including Black churches, Black barbers or mosques.

Chicago's Boy's Town was acknowledged as a queer territory using art deco-style ringed pylons that adorned the sidewalk. While this acknowledgment provided queers a location the pylons were largely neutral during daylight, and it was not until they were up-lit at night that they became visible. The city's justification for this being, it was an appropriate response to the conditions of urban gay life (Sanders, 2017). Thus, the territorial recognition via the pylon was a double-edged sword of acceptance allowing queer people to have designated space, but only at night. The design of the pylons themselves caused issues not only because some residents of the area were against providing a form of territory and therefore potential value to queers, but because of how they symbolized queerness and what this would allow — perhaps the opportunity to be openly queer? Public debate included such comments and complaints as “taking Halsted and putting it in drag”, the design being “over the top” (Sanders, 2017). Terms like “subtler”, “less gaudy”, and “more refined”, were also used to suggest the direction of the redesign in articles under headlines such as “Gay pride street markers get a toning down” and “Gay theme toned down in Halsted St. plan” (Sanders, 2017). This “toning down” served the existing community that would become the Boy's Town by encouraging its design to symbolize the acceptable

side of queerness; permitting belonging to the tasteful, semi-invisible bourgeois gay over and above the camp and drag (Bonnevier, 2007). This is to say, that even within a queer space or a space where particular groups of people are seen to belong, there are varying degrees of belonging depending on one's appearance relative to the built environment and this may affect ZAJ positively (bourgeois gay) or negatively (gaudy and the like). Inversely, it is recently well noted how the presence of heterosexuals in queer establishments is increasingly met with unease and blame for the dilution of queer experiences and losses of queer nightlife (Russell, 2022).

The disability framework also offers several comments on belonging-value association. Disability theorists Steinfeld and Maisel (2012) discuss the Everson Museum's (New York) attempt to implement accessibility, the result was a back-door entrance ramp the majority of people would not use. The opening of the door also relied on someone being the other side of it, thus, although access can be provided in a physical manner, this is not synonymous with symbolic access. It is understandable how those needing to use the Everson's back door to enter may feel less like they belong than others (this is if they were not deterred from entering at all) (Steinfeld & Maisel, 2012). It is also understandable how such special access points could highlight disabled users as immediately different, or at least not equal to those who have a normative entrance (Steinfeld & Maisel, 2012). Beyond points of access facilitating potential judgments at zero acquaintance, disability theorists highlight the hospital-like aesthetic inherent in the disabled access products — which, in most cases, stands in contrast to the general aesthetic of the place in which they are found (Gorny & van den Heuvel, 2017). This medicalization highlights the difference between people with disabilities and those who are assumed to be able-bodied, since the medical aesthetic of the apparatus symbolizes that the users require some form of medical attention (Cavanagh, 2001). This stigma can also be noted in the standardization of universal access areas, where the general public's desires for stylistic novelty and functional design improvement is often not applied, potentially highlighting how, through lack of aesthetic attention, a space often positions the disabled as an afterthought (Hamraie, 2017). Whether highlighted through access points, aesthetics, or layout, it is conceivable how the built environment can automatically frame any user as a secondary consideration. For example, tall individuals in standardized spaces/door and bulkhead heights, or older adults in high-tech spaces, can bring into question their perceived level of belonging to space at zero acquaintance.

Sanders (2017) transgresses the boundaries of the feminist, queer, racial and disability frameworks relative to the public restroom typology to demonstrate how a range of people can be regarded as belonging to a space to varying degrees. He suggests through several moments in history that the public bathroom has been a place of social anxieties triggered by the threat of a series of marginalized identities entering mainstream society. Historical milestones include debates sparked by the introduction of the 'ladies' room to accommodate women entering the workplace in the early twentieth century, the fight to abolish segregated 'colored' bathrooms by the Civil Rights Movement during the 1950s/60s, the fear of contamination posed by gay men using public lavatories during the AIDS crisis in the 1980s, and the pressure to make bathrooms accessible to people with disabilities tied to the passing of the Americans with Disabilities Act (ADA) in 1990 (Sanders, 2017). In each instance,

the public restroom is a point of contention where access is unwillingly permitted, perhaps as only to avoid the explicit segregation and location-value disparity discussed. Once permission is granted however, this typology seems to incite nightmarish scenarios that compel “normal” people to interact with the “abnormal” whom society has preferred to segregate (Sanders, 2017). While in theory, public restrooms are becoming increasingly openly shared (in the western world at least), they are still a contested site regarding transgender individuals. A moral panic over the presence of transgender people in sex-segregated public toilets began in 2015, with advocates citing high rates of violence faced by trans people, in particular trans women of color (Sanders, 2017). The restroom’s several concessions of access to Others, puts people together in a shared-space situation where they can directly judge and be judged by one another in accordance with how well they align with who really belongs; ladies versus gentleman, black versus white, abled versus disabled, gay versus straight (Sanders, 2017). Clearly, this scenario both catalyzes and affects ZAJ based on inherent notions of belonging, with some instances being so extreme as to cause violence (Sanders, 2017). Once more, inverse scenarios are conceivable; when someone who does not seem queer in queer establishment bathrooms or if someone wore corporate attire in a dive-bar, they may immediately seem out of place.

Across the spatial-discriminatory frameworks, examples help form the idea that spaces symbolize — with disparity — who belongs, and how this might affect value judgments of others at zero acquaintance. Similar to the location-value association theme, these examples also impress how judgments can be incited along a continuum of obviousness, from being trans within a dichotomous toilet typology, to not being white within a modernist architectural language, to being tall within a standard ergonomic space. In this theme, the discriminatory frameworks use ideas of normal, abnormal, primary or secondary user, concession, contesting, territory, binaries and dichotomy to articulate socio-spatial judgment. Through the concept of ZAJ these can be unified under the broad theme of how much someone is immediately regarded as belonging within a space.

Through this discussion, a series of theoretical propositions can be articulated;

- Spaces can turn people away if they do not feel like they are an appropriate user, thus perpetuating division and potentially inciting location-value ZAJ scenarios.
- Spaces facilitate ZAJ based on a continuum of belonging, those seen as the primary or ultimate user will be judged positively and vice versa, and as an extension of this....
 - If someone does not align to a space’s ergonomic characteristics, they may be negatively judged at zero acquaintance and vice versa;
 - If someone does not align to a space’s symbolic characteristics, they may be negatively judged at zero acquaintance and vice versa;
 - If someone does not align to a space’s aesthetic characteristics, they may be negatively judged at zero acquaintance and vice versa.

Discourse informing this belonging-value theme, as well as the previous location-value theme, are limited to the static appearance of people and as per the explanation

of ZAJs, they are made up of static and behavioral dimensions. The analysis formed a third theme for the behavioral dimension of first impressions and how they are potentially affected by the built environment.

Performative-value-association

Conceptualized from spatial discriminatory literature through the ZAJ concept, this performative-value theme highlights how space can be regarded as a stage that cues behavioral ideals, how well someone aligns with these may then affect ZAJ upon them. An initial example might be how the homeless can be judged for appropriating space in a seemingly unfitting way (Serlin, 2017). Regardless of the reasons why they are homeless they are often immediately perceived as being wrong or deficient since they are not using space in the designated or appropriate manner.

Architectural feminist Beatriz Colomina (1996) provides an example of performative-value belonging through her analyses of the Moller and Muller houses in Vienna, designed by Adolf Loos. Her critique identifies the way the houses maintain the gaze inside — back into the house rather than to an exterior setting. This is achieved through the positioning of couches and nooks that are nestled under windows to create backlighting and position a spectator's view internally. The occupants of these window spaces would then be given the upper hand of any gaze dynamic with other occupants in the room, with the window acting like a stage light upon them. The positioning of the varying rooms adjacent to one another also provides this gaze dynamic, with some rooms looking over into others through balustrades and partitions. Colomina (1996) paraphrases Loos, who describes the houses not merely as a series of decorated rooms, but as the stages for the theater of the family. She identifies further, how some rooms that peer into others are adorned with sheer curtains and some have no physical access to others to enhance Loos' staging effect; "What is being framed is the traditional scene of everyday domestic life" (Colomina, 1996, p. 89). Colomina (1996) argues the areas that provide the upper hand of the gaze are typically male occupied; the library/music room, for example, looks over into the kitchen area. Colomina concludes that the women in the house are then objectified — seen as nothing but part of space whose limits are defined by gaze, implying that women occupants could be judged in accordance with how well they are performing the duties ascribed and associated with their location. While an amplified example of everyday space, Colomina's analysis of the Loos houses frames space as a stage upon which there can be spectators and actors and how actor behavior can be judged in accordance with where they are. While this is a domestic example and one can assume that the occupants of these houses knew each other beyond acquaintance, it invites the idea that spaces can place some people into a panopticon scenario, framing them to be judged in accordance with how well they are performing in-line with a space's typical use.

In particular, disability theory can be used to conceptualize this theme as it inherently centers around the body and its actions in relation to space. The use of space disables certain people in it, by preventing them from participating in activities in the same manner as others (Steinfeld & Maisel, 2012), this is because disabled people often do not fit with the common-sense assumptions that underpin the "normal"

everyday, unnoticed, ways of doing things (Boys, 2014). If people cannot walk, they cannot climb a long and steep flight of stairs; if they cannot hear, they cannot understand public announcements; and if they cannot see, they cannot safely cross a busy street independently (Tooley, 2021). This explanation of disability frames disabled people as unable to do the things that those around them can — at least in the same way. It was not uncommon even in the 1970s and 1980s for disabled people traveling on public transportation, such as trains or airplanes, to have to wear adult diapers or use catheters and collection bags for their journey due to inappropriate or non-existent facilities (Serlin, 2017). This is in contrast to able-bodied individuals who are able to conform to moral and bacteriological expectations of good health in the public sphere. As disability theorist Serlin (2017, p. 215) states, “Even today, people with disabilities, who carry the stigma of dependence and lack of control over their bodies, have often been perniciously associated with failures, deliberate or otherwise, of personal hygiene”, identifying how the lack of appropriate or typical usage of space can highlight someone’s lack of value at zero acquaintance (in this case in regard to being unhygienic) — despite it not being their fault.

A real-life example that captures how space potentially affects ZAJ of behavior, which also supports the idea that people are held to blame for their lack of apparent “normalcy” in relation to the built environment, is recounted by wheelchair user Jean Ryan “the driver of the X28 bus refused to let me board because I could not safely board backwards... Although New York City Transit policy says we can board either forward or backward, this bus driver wouldn’t allow me to board forwards” (Ryan, 2006). When Ryan insisted on boarding which delayed the bus, passengers turned on her, “their eyes were full of hate. Many cursed me: ‘You selfish bitch!’ they blamed me for the driver’s refusal to let me on. I was making them late to work” (Ryan, 2006).

Disability theorist Crow (2017) recalls similar judgment scenarios for laying down in public places (beyond admission of any disability that would cause her to do this). Crow recounts one afternoon in her local pub, how she sipped her beverage and engaged in conversation. After nudging off her shoes she laid upon the cushioned window seat. The landlord then hurled himself toward her with anger saying “Get up, get up, get out. This is a respectable establishment” (Crow, 2017). Crow makes the point that lying down in some contexts, the home for example, feels safe, secure and guilt free and in certain public places she can lay down without negative judgment; the hospital bed and the park. However, laying down in public is mostly regarded as idle, lazy and offensive, if not legally prohibited. In these less-permitting contexts, Crow describes the tendency to feel shame from the judgment of others for not conforming her behavior despite lying down being a natural and typical action to perform (Crow, 2017).

A more acute performative-value scenario can be pointed out through the Skidmore, Owings and Merrill’s Air Force Academy which was designed using Cartesian coordinates and grids based upon the male body (Sanders, 2003). The grid system was used to shape courtyards, pathways, beds and wardrobes, which symbolizes masculine hierarchy, power and rigidity. Sanders (2003) implies the base frames anything but straight walks and rigid movements as being incorrect or unsuited (Sanders, 2003). It is understandable how any person that does not naturally perform rigid or

masculine body language, perhaps the disabled or effeminate, could be negatively judged at zero acquaintance in such a space.

Beyond disenfranchised groups, anyone could be staged in and across the built environment. Spaces offer vantage points; through glass or other materials that allow transparency such as curtains or one-way mirrors, through lighting, through placing occupants at varying heights to one another, through seating arrangements and so forth. This sets the stage for any ZAJ scenario, but those occupants that have the upper hand of the gaze, perhaps through physical positioning or perhaps through materiality that allows someone to be more of an observer, can allow more opportunities to scrutinise others' performances relative to their surroundings. As with Crow's (2017) account of lying down in contexts that seem odd, again this performance-space misalignment can extend to anyone. For example, left-handed individuals in predominantly right-handed setups, or older adults trying to use technologically integrated spaces that have QR codes for ordering food and drinks (restaurants and bars) or touchscreens for wayfinding (malls).

Discriminatory literature reveals how space can cue and stage behavioral expectations which other people's actions can be rapidly measured against, some being more potently obvious like the inability to use a space due to varying physical capabilities, others being subtler such as the performance of gender in a masculine space or trying to use technology integrations as a non-tech-savvy person. The examples discussed make apparent that behavioral-spatial value judgments can occur at varying levels of acquaintance, from observing a stranger's flamboyant or effeminate walk, viewing a homeless person sleeping on a sidewalk, or even witnessing a fellow patron in an overly relaxed position. In conceptualizing this theme, the discriminatory frameworks use ideas of normal, abnormal, (un)natural, contesting and aligning to articulate spatial discriminatory judgment. Through the concept of ZAJ these can be unified under the idea of how successful someone's performance is relative to a space.

Through this discussion, a series of theoretical propositions can be articulated;

- Spaces facilitate the meeting of strangers and are therefore arenas of ZAJ, however, spatial composition may invite observational advantages to judge other's performances and potentially affect ZAJ.
- If someone does not offer a satisfactory performance by aligning to spatial cues/a space's purpose, they may be judged negatively at zero acquaintance and vice versa.

Conclusion

This comprehensive review of spatial discriminatory discourse has highlighted the relevance of the sociological concept of ZAJ to frame first impression scenarios between people – as situated in and affected by the built environment. A train, a bus, a street, a suburb, or any spaces that put strangers together, contain, frame, stage, temporalize and have the potential to sway ZAJ in the everyday.

The frameworks within discriminatory design discourse (queer, feminist, racial and disability theory) were identified as cornerstones to conceptualize the built environment's possible relations to ZAJ, since they each discuss how social value perceptions relate to the built environment. Through an interrogation of the literature, amplified examples of how first impressions might be affected by space were identified and conceptualized into an any person-any person scenario. This led to three emergent theoretical themes on how ZAJ can be affected by the places in which they occur. The first theme explores how spaces physically divide people, allowing judgment via location-value associations. The second theme examines how people seem to belong in certain spaces more than others through their static appearance. The third theme considers how people align behaviorally with the spaces they occupy.

Spatial designers and researchers can use these emergent themes, and the theoretical propositions within them, to further investigate how space affects discriminatory judgments in first impression scenarios — especially in environments where first impressions are integral to functionality. For example, a corporate lobby, office or boardroom, a bar or nightclub, or the playground. Researchers in sociology can use this research to acknowledge three fundamental ways ZAJ scenarios are affected by the spaces these judgments are cast in, highlighting the built environment as a variable to be factored into future or precedent research on first impressions. Sociologists and psychologists might wish to question; does the setting offer a more advantageous position to some more than others? For example, do some have a view, or are closer to a bar or toilet area, is one part of the space more luxurious than the other? Does the setting make some people seemingly belong more than others? Are people equally able to understand and perform in accordance with the spatial cues present?

This research supports the idea that the built environment plays a role in first impressions in the above three themes along a continuum of both zero-ness and obviousness. Zero-ness, in reference to how some ZAJ scenarios occur over minutes of face-to-face interaction (for example in a theater), to not coming into direct contact at all with the people(s) being judged (for example, from viewing someone's run-down or generic building complex). Obviousness, in reference to how potentially the design of the built environment is potentially affecting a ZAJ, for example, how run down that building complex is or how easily its characteristics can be symbolically associated with its occupants, or perhaps how obviously difficult a space is to use and deliver a successful performance for some.

Noticeably less discourse was available that assisted in understanding how people are judged on their behavior in relation to space. This focus on the static attributes of people and space has been cited as a prevalent phenomenon in spatial discourse with some claiming the attitude is almost habitual (Thomsen, 2008). In the contemporary Western world, we assume the deepest and most important differences among people are their personality, character, intelligence, and their skills and experience, which are observed through behavior rather than static appearance (Buchanan, 2007). Thus, the ways in which behavior is judged in relation to space, including and beyond first impressions, may require future research and investigation.

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