

When Walls Talk: People Make Social Inferences From Towns' Protective Features

Amy Nguyễn* (abnguyen@ucsd.edu)
Department of Psychology
University of California, San Diego

Rodney Tompkins* (rtompkins@ucsd.edu)
Department of Psychology
University of California, San Diego

Adena Schachner (adschachner@ucsd.edu)
Department of Psychology
University of California, San Diego

Abstract

Human towns are shaped by intentional design. Here we ask whether people use societal features to make social inferences, specifically focusing on how the presence of protective architectural features influences people's intuitions about towns' residents. U.S. adults ($N = 100$) were presented with two novel societies – a 'protected' town with walls, locks, and gates, and an 'unprotected' town lacking such features. We manipulated whether residents had chosen or been randomly assigned where to live. Across both conditions, people judged that unprotected society residents felt safer, happier, and were nicer; and that protected society residents dressed more similarly, stayed inside more, and had more rules. Most people preferred to live in the unprotected society. Positive attributions and preference for the unprotected society were associated with liberal (vs. conservative) political affiliation. Overall, we show that people use the physical features of built environments to make social inferences about residents' behaviors, traits, and mental states.

Keywords: intuitive sociology; social cognition; protection; safety; socio-physical reasoning; political ideology

Introduction

"We shape our buildings, and afterwards our buildings shape us." – Winston Churchill

For millennia, humans have lived in environments dominated by intentional design: Streets, buildings, and public spaces are shaped by human goals, knowledge, and constraints (Adhya & Plowright, 2022). Here, we consider whether people use urban landscapes as sources of social information. That is, do humans use physical features of societies to make inferences about the people who live in them?

Recent work has argued that physical and social reasoning is tightly integrated, allowing people to derive social information from the physical world, including how mental states and actions lead people to shape their physical environment (Jara-Ettinger & Schachner, 2024; Liu et al., 2024). For instance, based solely on a room's or object's physical features, people can infer an agent's past actions and goals (Lopez-Brau et al., 2022; Lopez-Brau & Jara-Ettinger, 2023), knowledge states (Pelz et al., 2020), and even personality (Gosling et al., 2002). These judgments are often made by way of inverse planning: Observers can reason backward from environmental traces or behavior to infer the likely goals, beliefs, and actions that caused them (Baker et

al., 2009). This experimental work has thus shown that people can use physical objects to learn about others by reasoning about traces of their past interactions with the physical world.

In the current paper, we ask whether people also use aspects of urban design to make inferences about entire social groups, namely the behaviors, traits, and mental states of a society's residents. It is plausible that people may use the physical environment to reason about entire groups, not just individuals. From childhood, people reason about others in terms of group membership and social categories, using cues like language, accent, food preferences, race/ethnicity, and gender to make predictions and explanations of others' behaviors, traits, and mental states (Bodenhausen et al., 2012; Dunham, 2018; Liberman et al., 2017; Rhodes & Baron, 2019; Shutts & Kalish, 2021).

Recent work has hypothesized that physical markers may be particularly important signals of group identity at a large-scale, societal level (Moffett, 2024). In line with this idea, people intuitively view monuments as having strong social meanings (e.g., Confederate monuments in the American South; Booth & Kizzire, 2016; Henderson et al., 2021). Given the ability to derive social meaning about individuals from the physical world, it is thus plausible that people may extend these judgments and use a society's physical features to reason about the society's residents (Tompkins et al., 2025).

Protective Elements as Sources of Information

We test this idea with particular focus on how the presence of protective elements in the built environment – like walls around a gated community, or high fences surrounding a residential property – impacts peoples' intuitions about the residents' behaviors, traits, and mental states.

There is reason to believe that protective features of a neighborhood or town may license social inferences about its residents. The physical state of neighborhoods is known to influence people's personal feelings of safety (Austin et al., 2002). Thus, observers may infer differing feelings of safety based on the presence of protective features. In addition, recent work from political science has shown that at the international level, people form negative impressions of countries that built international border walls, including not only their government, but also their residents' perceived safety and overall favorability (Mutz & Simmons, 2022).

This raises the possibility that people may draw nuanced social conclusions about societies' residents based on smaller-scale protective walls as well.

The Current Study

Here, we sought to characterize how people use protective architectural features (or lack thereof) to make inferences about town residents' behaviors, traits, and mental states. We present findings from adult participants; however, study materials were designed to be comprehensible to children as well, to allow for future developmental comparison. This work is grounded in prior evidence that humans integrate physical and social knowledge, using objects to reason about others' behaviors and mental states from early in life (Jara-Ettinger & Schachner, 2024; Liu et al., 2024). Characterizing adults' mature inferences about the residents of protected versus unprotected societies lays the groundwork for future investigations to characterize the ontogeny and phylogeny of this extension of socio-physical reasoning.

In the task, adult participants were introduced to two towns, each depicted in a single image (see Figure 1). The two towns were matched, except for the presence of protective features: One town (but not the other) had a wall surrounding the town, fences/walls surrounding individual properties, and locks on doors. To distinguish the towns more easily, each was assigned a different dominant building color (red vs. blue), counterbalanced across participants.

Intentional Choice Manipulation

If people reason differently about the residents of these two towns, there are two possible reasons they may expect these differences. First, participants may reason that people shape the places they live: That is, people intentionally choose to live in places that have qualities they prefer. By this account, people may choose to live in a town with more walls, locks, and gates because they feel unsafe without such protective features, or they have a greater desire for privacy. Alternatively, people may reason that places shape the people who live there. By this account, once people move to a certain town, they become more likely to exhibit behaviors, traits, and mental states associated with the environment.

To tease apart these alternatives, we manipulated (between-subject) whether the towns' residents had chosen where they lived or had been assigned randomly. Similar manipulations have shown that from early in life, people distinguish between intentional and unintentional actions and interpret choices differently when they are accidental or constrained (e.g., Behne et al., 2005; Pesowski et al., 2016, 2021, 2023; Woodward, 1999; see Dunham, 2018; Tajfel, 1970). If people think that the towns' residents differ due to self-selecting into the town they want, then they should only make social attributions when the residents intentionally chose their town, not when they were randomly assigned.

However, if participants think that places shape the people who live there, then we should see no differences across these two conditions. In this case, participants should show the same pattern of social inferences about the towns' residents

whether they chose their towns, or they were assigned randomly. This pattern would also be in line with findings from social psychology, that even minimal group membership based on random assignment (like flipping a coin) can impact social reasoning, such as inducing in-group biases (Dunham et al., 2011; Dunham, 2018; Tajfel 1970).

Dependent Measures

To examine participants' social inferences about the behaviors, traits, and mental states of the two towns' residents, participants were then presented with a series of two-alternative questions, asking them to compare people in the two towns. These measures aimed to probe participants' inferences about differences in the two towns' residents, in several ways motivated by previous literature.

First, motivated by previous work on feelings of safety in neighborhoods and societies (Austin et al., 2002; Mutz & Simmons, 2022), participants were asked to judge in which town people felt safe. If participants think that protective features *cause* people to feel safer, then they should judge that people in the protected town feel safer. Alternatively, if participants think that others build or surround themselves with protective features only if a threat exists, then participants may judge that the people in the unprotected town feel safer, despite the town lacking protective elements beyond buildings.

Attributions of feelings of safety might serve as a basis for further inferences about residents' emotional states; for example, people who feel safe may be more likely to feel happy. While we do not directly explore a causal relationship between safety and happiness in the present study, this hypothesis served to motivate the inclusion of happiness as a dependent variable. In addition, we reasoned that feelings of safety and the desire for protective barriers might license inferences about the behavior of the residents, namely whether they would be expected to interact in a prosocial way (Penner et al., 2005), follow the society's rules and norms (Gross et al., 2022), show behavioral conformity in manner of dress (Cialdini et al., 2001; Hester & Hehman, 2023), and choose to stay inside (e.g., to maximize protection from physical barriers). We thus incorporated measures of each of these constructs. To best understand the rule-following measure, we also asked participants to judge which town had more rules, as we reasoned that expectations about different numbers of existing rules could interact with tendencies to follow rules. To check if people's inferences were due to inferring socio-economic differences between the towns, we asked them to select which town had more wealth. Lastly, to get at people's overall preference and positive feelings for one town over the other, we asked participants which of the two towns they would personally prefer to live in.

Overall, if participants believe that people in the unprotected society lack protective elements because of lower levels of threat or need for protection, then people may broadly associate positive behaviors, traits, and mental states with the unprotected town (e.g., feeling safe; being happy; behaving nicely; first-person preference), and negative

qualities with the protected town (e.g., feeling not safe; having more rules to follow; staying inside; conformity). Alternatively, if people believe that people feel safe only *because* they have protective elements, then people may instead associate positive qualities with the protected town.

Political Affiliation as a Predictor

As both causal pathways seem plausible, we hypothesized that there may be individual differences in which mental model adults hold (either feelings of safety causing lack of need for protective barriers; or the addition of protective barriers causing feelings of safety). We hypothesized that political affiliation could predict individual differences, as conservatives tend to prioritize privacy and security more than liberals (Brandt & Crawford, 2016; Jost et al., 2003; Waytz et al., 2019). We therefore included a measure of political affiliation, established in previous work (Leshin et al., 2022), to study whether political affiliation predicted the nature of participants' social inferences about people living in protected and unprotected communities.

Methods

Participants

100 U.S. adults ($M_{age} = 40.52$ years, $SD = 11.14$, range = 25–72; 44 men, 53 women, 3 non-binary or gender-diverse people) participated in the study online via Prolific (www.prolific.co) from November through December of 2024, and were compensated \$1.40 for approximately 8 minutes of their time (equivalent to \$10.50/hour). Participants self-identified as the following races/ethnicities: White ($n = 61$), Black or African American ($n = 14$), two or more races and/or ethnicities ($n = 10$), Asian or Asian American ($n = 9$), Hispanic or Latine ($n = 3$). Additional participants were tested but excluded based on preregistered criteria, including initial experimenter error in task implementation, which was then fixed ($n = 28$), failing attention checks ($n = 20$; see Procedure; $n = 2$ failed the first; $n = 4$ failed the second; $n = 14$ failed the third), and explicitly indicating that they did not pay attention ($n = 3$).

Design

Participants were randomly assigned to one of two conditions: Choice ($n = 50$) or Random ($n = 50$). Participants in the 'Choice' condition were informed that the residents chose to live in their respective towns, whereas participants in the 'Random' condition were informed that the residents were randomly assigned to live in their respective towns. The towns were depicted as horizontally mirrored images of each other, except for the addition of protective elements in one but not the other (see Figure 1). For ease of reference, each town's illustrated buildings were colored red or blue and respectively referred to as "Red Town" or "Blue Town." Which town was 'protected' or 'unprotected' was set to evenly randomize across participants, resulting in an approximate counterbalance (i.e., for approximately half the



In one of these towns, people [X], and in one of these towns, people [Y]. In which town are people [X]?

□ Blue town

□ Red Town

Figure 1: Example of experimental trial shown to participants. Images are copyrighted by and used by permission of VYOND, trademark of GoAnimate, Inc.

participants, "Red Town" was protected, and "Blue Town" was unprotected).

The order of the seven primary dependent variables was set to evenly randomize across participants (resulting in an approximately counterbalanced order). These dependent variables were followed by an attention check question, and additional measures in a fixed order (see Procedure).

Procedure

Participants were introduced to the two towns, which were described as the primary location for residents' daily lives ("The people who live in these towns go to school, work, shop for things like clothes and food, and usually hang out in their own town. They can leave their town whenever they want, but they spend a lot of time in their own town.").

Each town's protected and unprotected qualities were then pointed out in turn, in otherwise-matched descriptions (this wording was designed to be accessible to future child participants): "[Red/Blue] Town [has/does not have] a lot of fences and a lot of walls. See? These buildings [have/do not have] fences and walls around them. See behind the town? There's [a wall/no wall] that goes around the whole town. The whole town [is/is not] inside this wall. The people in [Red/Blue] Town also [use/do not use] a lot of locks. [They/They do not] lock their fences, doors, and windows". The first attention check followed this description ("Which town has a lot of fences and walls, and people locking their fences, doors, and windows?"). Depending on Condition assignment, participants were then told either that people chose which town they lived in, or were assigned at random ("To live in Red Town or Blue Town, people [get to choose where they will live/spin a wheel to see where they are randomly assigned to live]. People [do not get to] choose to live in Red Town, and people [do not get to] choose to live in Blue Town.] The number of people who live in Red Town and Blue Town is about the same"). This description was immediately followed by the second attention check ("Did people get to choose to live in Blue Town or Red Town, or did people NOT get to choose to live in Blue Town or Red Town?").

Participants were then prompted with a series of questions for each of our dependent variables. These questions

followed a similar format: “In one of these towns, people [X], and in one of these towns, people [Y]. In which town do/are people [X]? The questions concerned happiness (“are happy”/“are not happy”, X/Y respectively); being nice (“are nice”/“are mean”); feeling safe (“feel really, really safe”/“do not feel safe at all”); following rules (“follow the rules”/“do not follow the rules”); dressing similarly (“dress the same as each other”/“dress differently from each other”); walking around outside (“stay inside a lot”/“walk around a lot”); and number of rules to follow (“there are many, many rules for people to follow”/“there are only a few rules for people to follow”). The third and final attention check question was embedded to appear after the seven dependent variables to ensure response quality (“In one of these towns, people like apples more than oranges. To show you are paying attention, please select both towns as your answer, not just one. In which town do people prefer apples to oranges?”; both options could be selected on this question only).

Next, participants indicated which town they themselves preferred to live in (protected vs. unprotected) and their intuitions about the towns’ wealth (“Which town do you think has more money: Red Town, Blue Town, or Neither?”). They also provided free-response answers to prompts (not analyzed but included here for completeness) probing why they would prefer to live in their chosen society and the purpose of the town’s protective measures.

Following the dependent variables described above, participants answered several demographic questions, including their current political affiliation, measured using a seven-point scale from Leshin et al. (2022) with the scale-points: *Very Liberal* (coded as 0; $n = 16$ participants), *Liberal* (1; $n = 26$), *Slightly Liberal* (2; $n = 14$), *Moderate* (3; $n = 20$), *Slightly Conservative* (4; $n = 9$), *Conservative* (5; $n = 8$), *Very Conservative* (6; $n = 7$). Other measures (not analyzed but included here for completeness) concerned the community in which the participant currently lived (e.g., gated vs. ungated; urban, suburban or rural) and feelings of safety in their current residence and community.

Results

We first tested whether participants’ responses differed by Condition, that is, whether the residents had intentionally chosen where to live, or been randomly assigned. To do so, we conducted a separate logistic regression for each of the dependent measures, predicting ‘Response’ (Protected vs. Unprotected Town) from Condition (Choice vs. Random, set as the sole predictor variable). Condition, however, was a significant predictor for only one dependent measure: which town had more rules ($\beta = 2.74$, $SE = 1.13$, $z = 2.43$, $p = .015$). Although people selected the protected town as having more rules in both conditions, the effect size was larger in the random condition (Random: $M = 98.00\%$, 95% CI [89.35, 99.95], $BF > 1,000.00$ [$\pm 0.00\%$], $p < .001$; Choice: $M = 82.00\%$, 95% CI [68.56, 91.42], $BF > 1,000.00$ [$\pm 0.00\%$], $p < .001$). For all other dependent measures, people made the same inferences about the town residents regardless of whether they had chosen where to live or been assigned

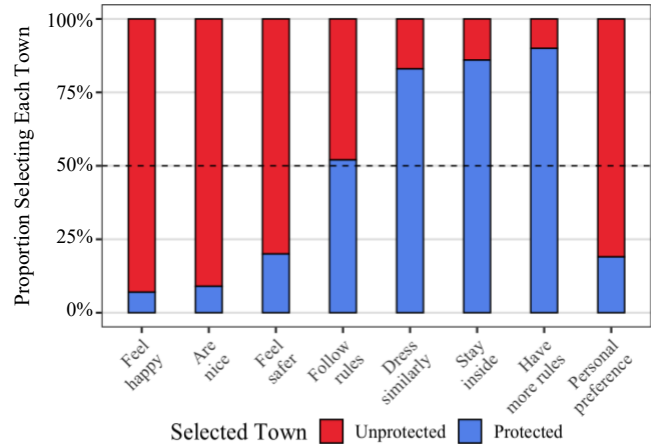


Figure 2: Results. The dashed line at 50% represents chance responding.

randomly (feel happy, are nice, feel safe, follow rules, dress similarly, stay inside, preference; all $ps > .395$). Considering the lack of substantial divergence in reasoning across the two conditions, we collapsed across Condition for all subsequent analyses.

To examine participants’ inferences about people in protected and unprotected societies, we conducted two-tailed binomial tests for each dependent variable comparing responses to chance (50%; see Figure 2). Overall, participants attributed several positive behaviors, traits, and mental states to residents of the unprotected town. Notably, participants judged that unprotected town residents feel safer than those of the unprotected town (80.00%, 95% CI [70.82, 87.33], $BF > 1,000.00$ [$\pm 0.00\%$], $p < .001$). In addition, residents of the unprotected town were judged to feel happier (93.00%, 95% CI [86.11, 97.14], $BF > 1,000.00$ [$\pm 0.00\%$], $p < .001$), and act more prosocial (nice vs. mean; 91.00%, 95% CI [83.60, 95.80], $BF > 1,000.00$ [$\pm 0.00\%$], $p < .001$). In addition, when asked about which town they would prefer to reside in, most participants selected the unprotected society (81.00%, 95% CI [71.93, 88.16], $BF > 1,000.00$ [$\pm 0.00\%$], $p < .001$).

Participants did not always select the unprotected town: Rather, participants reliably selected the protected town when asked who stayed inside more (86.00%, 95% CI [77.63, 92.13], $BF > 1,000.00$ [$\pm 0.00\%$], $p < .001$), showed conformity of dress (dressed similarly to each other; 83.00%, 95% CI [74.18, 89.77], $BF > 1,000.00$ [$\pm 0.00\%$], $p < .001$), and had more rules to follow (90.00%, 95% CI [82.38, 95.10], $BF > 1,000.00$ [$\pm 0.00\%$], $p < .001$).

People’s responses did not differ from chance when asked which town’s residents more often followed the rules (52.00% of participants selecting the protected town, 95% CI [41.78, 62.10], $BF = 0.26$ [$\pm 0.01\%$], $p = .764$). Participants also responded that the towns had equal wealth: When asked which town had more money, 44.00% selected “Neither” (95% CI [34.08, 54.28], $BF = 0.47$ [$\pm 0.01\%$], $p = .025$, compared to chance = 33.33%), with others choosing the two towns at similar rates (34.00% protected, 22.00% unprotected; $\chi^2(1, N = 54) = 5.00$, $p = .082$).

Political Affiliation as a Predictor

Lastly, we examined whether political affiliation predicted people's inferences about people in the two towns. To do so, we conducted a separate logistic regression for each dependent measure, predicting 'Response' (Protected vs. Unprotected Town) from Political Affiliation [*Very Liberal* (0) to *Very Conservative* (6)] set as the sole predictor variable. Of note, this study was conducted in November and December of 2024 (immediately after the U.S. presidential election), and only 24 of 100 participants indicated conservative-leaning political affiliations, while 56 identified as liberal (with the remaining 20 identifying as moderate; refer to Procedure for exact details). Thus, the present data may be underpowered to detect patterns of reasoning among conservative-leaning participants and should be interpreted with caution.

These analyses revealed that with increasing liberalism, participants were more likely to hold positive views of people in the unprotected society (see Figure 3). Thus, with increasing liberalism, people were more likely to select unprotected town residents as feeling safer ($\beta = 0.35, SE = 0.14, z = 2.48, p = .013$), feeling happier ($\beta = 0.76, SE = 0.27, z = 2.84, p = .005$), and being nicer ($\beta = 0.75, SE = 0.24, z = 3.13, p = .002$). Moreover, with increasing liberalism, people were more likely to judge that protected town residents stay inside more ($\beta = 0.32, SE = 0.16, z = 2.01, p = .045$) and have more rules to follow ($\beta = 0.52, SE = 0.22, z = 2.38, p = .017$). Thus, as participants' ideologies became more conservative, they became less likely to attribute positive characteristics to the unprotected town over the protected town residents.

Political Affiliation also significantly predicted in which town participants personally preferred to live. With increasing liberalism, people more often preferred the unprotected town. With increasing conservatism, people became less likely to prefer the unprotected town ($\beta = 0.54, SE = 0.16, z = 3.40, p < .001$; see Fig. 3).

Political Affiliation did not predict judgments regarding which people dressed similarly, or which people more often followed the rules ($ps > .379$).

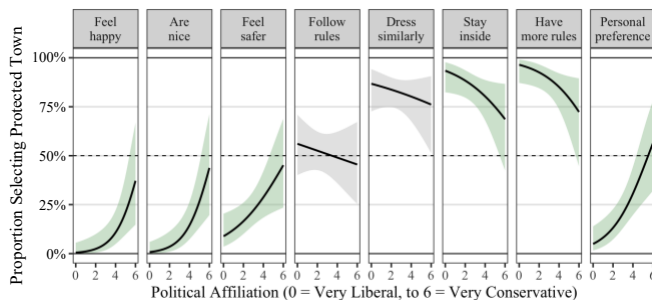


Figure 3: Responses predicted by Political Affiliation (0 = Very Liberal, to 6 = Very Conservative). The dashed line at 50% represents chance responding. Regressions for which Political Affiliation was a significant predictor are denoted with green error bands (vs. gray for non-significant).

General Discussion

The present study provides evidence in support of our hypothesis that people draw rich social inferences about society residents from their built environments alone, particularly based on the presence and use of protective features like walls, gates, and locks. Thus, even in the absence of direct observation of residents and their behaviors, people use the protective features (or lack thereof) to make systematic inferences about residents' behaviors, traits, and mental states. These findings provide novel evidence for a tight integration between physical and social reasoning in human cognition (Jara-Ettinger & Schachner, 2024; Liu et al., 2024), and for the idea that physical markers provide important information about societies (Moffett, 2024).

Our results reveal that people consistently attribute more positive characteristics to residents of the unprotected society, judging them as happier, feeling safer, and acting nicer compared to residents of the protected society. In contrast, features consistent with desire for rigid societal structures and privacy were consistently attributed to the protected society (conforming dress; having more rules; staying inside). This pattern emerged regardless of whether the residents in question had chosen their society or been randomly assigned to it, suggesting people's inferences stem from beliefs about how physical environments shape their inhabitants, rather than beliefs about how people self-select into environments matching their pre-existing characteristics. Overall, these findings extend previous work showing that people can infer individual traits and mental states from physical spaces (Lopez-Brau et al., 2022; Gosling et al., 2002) to the societal level, demonstrating that people use physical features to reason about entire social collectives.

The attribution of greater feelings of safety to residents of the unprotected society is particularly noteworthy, as it suggests people interpret the absence of protective features as indicating genuine security and lack of threat, rather than vulnerability. This inference may stem from reasoning about the costs involved in constructing protective features: People may view the willingness to incur such costs as evidence of underlying threat or insecurity to their collective (Cikara et al., 2013; Jara-Ettinger et al., 2016). This finding aligns with recent work showing that international border walls can lead to negative evaluations of the wall-building country and its residents (Mutz & Simmons, 2022). Together, these results suggest that visible barriers may be interpreted by adults as signals of underlying insecurity or threat rather than effective protection. This interpretation is supported by our finding that participants attributed more rules, greater behavioral conformity (in dress), and greater tendency to stay inside to the protected society, potentially viewing the protective features as manifestations of desire for control, stemming from perceived threat or insecurity.

Political ideology emerged as a significant predictor of these social inferences, consistent with previous work showing that liberals and conservatives differ in their prioritization of security versus openness (Brandt & Crawford, 2016; Jost et al., 2003; Waytz et al., 2019). More

liberal participants showed stronger tendencies to attribute positive characteristics to the unprotected society and were more likely to personally prefer living there. This suggests that political ideology shapes not only first-person preferences but also how people interpret the social meaning of physical features in the environment.

These findings have important implications for our society-based reasoning (Moffett, 2024; Shutts & Kalish, 2021), which is likely far broader than we have measured in the current work. For example, recent research has shown that the presence of Confederate monuments – statues honoring pro-slavery leaders in the American Civil War – in U.S. counties predicts historical patterns of violence such as hate-crime based lynchings (Henderson et al., 2021). These monuments are long a source of contention and offence, particularly due to their associations with racial oppression as well as signaling possible endorsements of egregious societal values. This example suggests that features that go beyond protective elements may influence perceptions of safety (Syropoulos et al., 2021, 2024). In real-world social contexts, inferences from protective features are likely integrated with information from multiple other physical features of societies, which may be richly interpreted as reflecting and reinforcing abstract social values in addition to residents' behaviors, traits, and mental states.

Future Directions

While the current study aimed to investigate the impact of the presence of protective features, real-world environments likely contain a multitude of potentially competing social cues. Future work could systematically vary additional physical features to understand their contributions to social reasoning. For example, people may use the prominent placement of a particular town element (a library vs. a religious building) as a signal of the relative value residents place on different activities (Gehl, 2013). In addition, manipulating whether protective barriers surround the entire society (e.g., a city wall) or more individual aspects of the society (e.g., yards) could illuminate how people reason about collective versus individual threats, and how different scales of protection influence social attributions. It may also be informative to test scenarios where both towns are protected but differ in how residents engage with those protective features; for instance, one town whose residents actively use and maintain them, and another where they are never used. This could help reveal whether judgments stem not only from the existence of protection, but also from perceived costs, vigilance, or intentions associated with enacting protection.

Second, our sample was limited to U.S. adults. While we expect that the ability to make social inferences from physical features generalizes across cultures (see Mutz & Simmons, 2022), we also expect substantial cross-cultural diversity in the specific inferences people make from features of the built environment, especially for protective artifacts (see Syropoulos et al., 2021, 2024). For example, people raised in particularly threat-present societies, such as active warzones,

may have different concepts of what is required for protection and therefore reason differently about which physical contexts would feel safe. This expectation is strengthened by our current finding of differences by political affiliation, even within the U.S. population. For some protective features, however, there may also be consistency across cultures. For example, existing work finds some cross-cultural consistency in inferences about societies who build international border walls (Mutz & Simmons, 2022).

The current work also opens important developmental questions about the origins of social reasoning from societal features. The current paradigm was intentionally designed to be accessible to children to enable developmental comparison (which we are conducting, in ongoing work). Given that children show a sophisticated ability to use physical cues for social reasoning about people (see Jara-Ettinger & Schachner, 2024; Liu et al., 2024) and also reason about social groups from early in life (Powell & Spelke, 2013; Dunham, 2018; Liberman et al., 2017; Rhodes & Baron, 2019; Shutts & Kalish, 2021), it is plausible that even children make nuanced inferences about social collectives from their built environments.

Conclusion

Our findings demonstrate that people use physical features of the built environment, particularly protective elements, to make systematic inferences about societal residents' behaviors, traits, and mental states. We provide preliminary evidence that political ideology predicts the nature of these inferences, suggesting that differences in how people reason about safety and physical protection may contribute to ideological divisions about optimal community design. Overall, this work shows that people intuitively reason about societies from their physical structures, opening new questions about the development and cultural universality of this socio-physical societal reasoning.

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