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A Table on the Beach: Probing Odd Invitations by Scaling Conspicuity

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Figure 1: A floral invitation awaiting participation.

Abstract

Everyday public life is filled with fleeting opportunities for social connection, yet designing for such spontaneous encounters can be an elusive challenge. Building on *Odd Invitations*, defamiliarised objects that invite exploratory engagement without explicit instruction, we investigate how such invitations can mobilise social traction within a given socio-cultural setting. Following a research-through-design approach, we deployed six lo-fi invitations involving a defamiliarising table at beaches in Sydney, progressively scaling their conspicuity to probe how strangers transition from spectator to participant. Analysing these encounters through Participation Gestalt, we show how, for Odd Invitations encountered by chance in everyday public space, participation depends not only on what happens during engagement, but also on how an invitation first becomes noticeable and signals social permission to engage. We contribute an incremental probing approach for designing Odd Invitations and show how Participation Gestalt can be extended for Odd Invitations by proposing *conspicuity* as a pre-participation quality and reframing the socio-cultural setting as *temporally dynamic*.

CCS Concepts

• **Human-centered computing** → *Interaction design theory, concepts and paradigms.*

Keywords

odd invitations, participation gestalt, defamiliarisation, conspicuity, incremental probing, in-the-wild

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1 Introduction

There is a particular kind of beauty in the small, spontaneous moments of social interaction in everyday life: a stranger holding the lift door just long enough, two people stepping aside for each other in the same awkward little dance, or a quiet exchange of laughter when the train announcement ends with a strangely charming wish for everyone to have a lovely day. As Gehl [13] describes in *Life Between Buildings*, it is within these modest, ordinary situations that public social life in cities is built. Not only through grand events but rather through the accumulation of small momentary encounters. These little moments of connection are difficult to plan, and designing for such is far from straightforward. Instead of trying to force such spontaneous encounters, we argue that design can take on a facilitative stance by providing the conditions under which such moments can emerge.

Building on Hobye [22]'s broader program of *Designing for Homo Explorens*, our previous work has developed the notion of Odd Invitations as a way to promote social interaction in public space [18, 19]. Odd Invitations are defamiliarised everyday objects or situations that rely on strangeness to invite exploratory engagement between people without explicit instruction. This work directly operationalises the social ambition outlined above. So far, these studies have explored Odd Invitations at two ends of a social spectrum: festive environments in which people are already primed for playful engagement [19, 21, 23], and everyday settings frequented by necessity, such as public transport, where invitations are particularly sensitive and risk being perceived as intrusive [18]. The latter design study demonstrates how people's interpretation of an Odd Invitation is strongly influenced by the socio-cultural setting it is deployed in. Whereas a "loud" invitation may feel playful in a festive setting, the same design may come across as obnoxious in a sober environment such as a train carriage.

Regardless of the particular context, all Odd Invitations face the same fundamental challenge, however. Every potential participant starts as a spectator, and before participation can unfold, someone must first notice the invitation, interpret it as one, and then cross the threshold into engagement. This threshold remains underexplored, and can be especially delicate in everyday public spaces where interaction with strangers is possible but not necessarily expected. We therefore ask: *How can Odd Invitations be designed to create social traction in a situated public setting, and how does their conspicuity shape the transition from spectatorship to participation?*

To explore this question, we turn to a different kind of public space: the beach. Beaches sit somewhere in a social grey zone, between public and private, social and solitary. It is a leisure-oriented place where people voluntarily choose to visit, often to enjoy themselves, relax, linger, or to participate in activities with others. At the same time, it is not inherently a social destination in the sense of expecting interaction with strangers. People typically install themselves in parallel, creating their own temporary private spaces without seeking for social interaction per se. This makes the beach a suitable sandbox environment for probing how Odd Invitations might mobilise social interaction where it is possible but not guaranteed, and a productive middle ground between the two extremes previously studied.

Following a research-through-design (RtD) approach [11], we deployed six lo-fi Odd Invitations at beaches on the coastline of Sydney, Australia. The probes were designed as incremental variations in *conspicuity*, ranging from relatively inconspicuous to more visually, materially, and socially prominent ways of drawing attention within the beach setting. Across this series, we observed how strangers noticed the invitations, made sense of them, and decided whether or not to cross the threshold into participation.

To analyse the encounters that emerged around our six variants, we apply the Participation Gestalt (PG) framework by Dalsgaard et al. [7] as an analytical lens for Odd Invitations. PG offers a vocabulary of five qualities — *expressivity*, *investment*, *exposure*, *sociality*, and *persistence* — through which the holistic character of participation with a public installation can be understood [7]. We chose PG because it shares two fundamental orientations with Odd Invitations: both recognise participation as shaped by relations between participant, artifact, spectator, and socio-cultural setting, and both employ design as a medium for mobilising social engagement in public space. This also allows us to build constructively on an existing framework rather than proposing a new conceptual model from scratch, in line with calls in HCI to engage more cumulatively with theory [10]. However, PG was developed for large-scale, curated digital art installations where the audience arrives already somewhat primed for engagement. Odd Invitations, on the other hand, are encountered by chance in everyday settings, where participation cannot be assumed. When applying PG to Odd Invitations, the current vocabulary helped us understand what happens *during* participation, while also revealing the need to better account for what happens *before* participation: the moment at which a spectator decides whether an unfamiliar object or situation is worth engaging with at all. We treat this contrast not as a limitation of PG, but as a generative opportunity to extend its vocabulary for the particularities of Odd Invitations.

Our deployments show that conspicuity is not simply a variable to be "maximised" to attract participation. More conspicuous invitations attracted attention, but they could also become too strange, too performative, or too socially exposing. We therefore treat conspicuity as a situated quality, as the character of each invitation along the continuum made itself noticeable, interpretable, and socially permissible to engage with in nuanced ways. We further show that the social traction of an Odd Invitation is shaped by the temporal unpredictabilities that come with the setting in which it unfolds. The same invitation may be interpreted differently depending on crowding, time of year, nearby activities, recent events, or the presence of other people around the artifact.

This paper makes two contributions. First, we demonstrate an incremental probing approach for designing Odd Invitations, offering a structured method for designers to iteratively explore how different degrees of conspicuity create or fail to create social traction in a given setting. We illustrate this through a case study involving six lo-fi Odd Invitation variants using a defamiliarising table deployed at beaches in Sydney. Second, we offer a situated extension of Participation Gestalt for analysing Odd Invitations by proposing *conspicuity* as a pre-participation quality and by reframing the socio-cultural setting as *temporally dynamic* rather than fixed.

2 Related Work

2.1 The Beach as a Setting for Social Encounters

Within Design Research and HCI, everyday public life has been explored through approaches for supporting or probing sociality, including public displays [3, 9, 28], interactive furniture [17, 40], urban robots [24], media façades [6], and interactive installations [7, 26]. Hespanhol and Dalsgaard [20] argue that much work in public media architecture has focused on interfaces and technological novelty rather than the forms of social mobilisation they put into effect. Much of this literature also gravitates toward familiar urban sites, such as cultural centres, streets, and transportation hubs, and toward interaction organised around information, screens, spectacle, or cultural events. Our work departs from this repertoire, turning to a rather 'bare' and self-organised public context, with a notable absence of screens and digital infrastructure.

The beach sits somewhat apart from these typical sites, and is particularly interesting because it complicates easy assumptions about what "public" implies. People visit by choice, often to relax, to play, or simply to be in the presence of others without necessarily being with them. They temporarily claim a small territory of the beach as their own by laying out towels, bags, or placing an umbrella, creating a patchwork of short-term domesticities within a shared landscape, typically within proximity to others. In Goffman [14]'s terms this could be considered a *stall*, a temporarily claimed private space within a public setting wherein people can temporarily let down their guard and escape the requirement of *civil inattention* — the polite acknowledgment of others without further engagement [14, 15]. At the same time, people still find themselves in an open environment that is socially dense but interactionally sparse, a grey-zone between public and private that leaves room for interaction without too much pressure. As Goffman notes, *"acquainted persons in a social situation require a reason not to enter in a face engagement with each other, while unacquainted persons require a reason to do so"* [15]. This is where Odd Invitations can grant people that reason, and act as a potential social catalyst within an otherwise loosely coupled public setting.

2.2 Odd Invitations

Building on Hobye's broader program of *Designing for Homo Explorens* [22, 29], our previous work has conceptualised Odd Invitations as a designerly way to provoke social situations in (semi-) public settings [18, 19]. Placed in the flow of everyday life as chance encounters, they serve as entry points into exploratory engagement without explicitly demanding participation. At their core is *defamiliarisation* as an underlying mechanic [34, 38]. By layering a degree of strangeness onto familiar objects or situations they unsettle everyday expectations just enough to open a space for curiosity, play, and engagement. Odd Invitations rely on this friction and ambiguity to make interaction feel possible and tempting while leaving it socially negotiable [12, 30].

The concept was first articulated through the Undertable [19], where we introduced Odd Invitations as a fifth manifesto aspect of *Designing for Homo Explorens*. This articulation emerged from the characteristic sequence through which participants engaged with the Undertable: *Consume – Reflect – Indulge* [19]. In this work, Odd Invitations were proposed as a call to design more deliberately for the full trajectory through which people are enticed into an exploratory experience surrounding an artifact. This included not only the interactive artifact itself, but also the scaffolding around it, such as flyers, posters, and ambient projections, which together helped to create an ambiance that made the situation more approachable. Our subsequent train study shifted this concern into a more sober everyday setting [18]. Whereas much work under the Homo Explorens umbrella had been studied in festive or event-like environments, where people are already more likely to be socially 'loose', the train study examined how such a design program might unfold in the almost stereotypical anti-social context of everyday train commuting. This study made the contextual sensitivity of Odd Invitations apparent as people typically arrived with reservation and a more subtle design strategy was required to fit in.

What this lineage leaves open is a practical way of navigating that threshold within a given public setting. Prior work has shown that Odd Invitations can scaffold exploratory social experiences, and that their success is highly prone to the context in which they are encountered. Yet what is missing is a methodological approach for designers to iteratively compare and tune different invitation strategies within the a chosen context. Our work addresses this gap through an incremental prototyping approach for probing how different Odd Invitations become approachable — or fail to do so — within the specifics of a public space.

2.3 Participation Gestalt

How people experience and engage with interactive installations in public space has been studied from multiple angles in HCI. Reeves et al. [30] argue that every interaction with a public system is also a performance observed by bystanders, and that the *spectator experience* should be proactively included when designing public installations. Building on this, Dalsgaard and Hansen [8] introduce the notion of *performing perception*, arguing how the reflexive awareness of how participants appear to others while engaging with an installation in public, shaping the character of their participation. Relatedly, social mechanics such as the *honeypot effect* describe how visible engagement can draw in others, turning a small interaction into a self-amplifying social attraction [3, 39]. These perspectives illustrate that designing for social engagement in public space stretches beyond designing for the participants' experience only and requires attending to the whole web of relations around an artifact, including participants, spectators, and the social situation at large.

The *Participation Gestalt* (PG) framework by Dalsgaard et al. [7] systematises this holistic view into an analytical tool. Drawing on gestalt as a *unified perception*, the framework treats participation not as an isolated interaction between person and artifact, but as "*the unified perception and experience of participatory qualities as they unfold through interaction with the installation in a sociocultural setting*" [7]. It offers a vocabulary of five qualities through which this gestalt can be understood and evaluated across installations: *expressivity* (how much participants express themselves during interaction), *investment* (the time and effort they commit), *exposure* (how publicly visible they are while engaging), *sociality* (the degree of interaction between participants), and *persistence* (whether participants leave social traces accessible to others).

We apply the PG framework as an analytical and sensitising lens to make sense of the encounters with the odd invitations. We chose Participation Gestalt because it shares a fundamental orientation with Odd Invitations in how design mediates sociality in public space. Both adopt a holistic view on how participation takes shape between participant, artifact, and spectators, and both treat the socio-cultural setting as a constitutive part of the experience rather than a trivial backdrop. Despite these similarities there are some differences, however. PG was developed to understand and evaluate participation with larger-scale, often curated, digital art installations that tend to arrive with a certain cultural weight and an audience already somewhat primed for participation. Odd Invitations take on a more modest stature. They are smaller, lo-fi, self-standing, and encountered by chance in the flow of everyday life where participation is not guaranteed. We find this contrast more generative than problematic as it gives us a reason to look closely at what PG's vocabulary illuminates in our material, and where its existing terms need to be re-situated for Odd Invitations encountered by chance in everyday settings.

3 Methodology: Incremental Probing

Our goal is to develop a better understanding of how Odd Invitations can be designed to gain social traction in a given socio-cultural setting, in our case the beach. We learned from our previous train study [18] how a 'clever' design with subtle interactive materiality may not always be rendered as a legible invitation in an everyday setting. In line with this observation, we opted for a low-fidelity approach, working with simple, inexpensive materials and familiar props that are easily accessible, quick to assemble and deploy, or Wizard-of-Oz'd if needed. This allowed us to probe the beach context and identify what sparks social engagement before committing further time and resources to a more sophisticated Odd Invitation design. In doing so, our work seeks to inform designers with an approach that can be deployed as an early-stage, divergent, segment of a classical design process, with specific attention to a chosen situated socio-cultural setting.

Following a RtD approach [11], we structure our probing process by taking an incremental flow to our Odd Invitations, progressively scaling the conspicuity of the invitation. We use a simple coffee table (l:40 x w:50 x h:45 in cm) bought from a local thrift shop as the vehicle for our RtD process in testing Odd Invitation variations. Explained through Vande Moere and Wouters [37]'s terminology, the coffee table fulfils two functions: first, it serves as the initial push to defamiliarise the scene by introducing an artifact that is out of place at the beach (*environment*) and stands out to draw attention, and second as a *carrier*, the facilitating platform for the *content* – the Odd Invitation variants. Regarding the latter, we imagine an incremental scale of conspicuity of the Odd Invitation in relation to its context, scaling from inconspicuous or modest to more conspicuous and extravagant in how much attention it aims to draw within its periphery (see Fig. 2). The motivation for this scale came from Ju and Leifer [27]'s Implicit Interaction Framework, which proposes two axes based on the relation between interactive system and user: attention demand, and initiative taking. The six variants tested in our study are the coffee table by itself, the coffee table with a permission sticker, a flower vase, a Jenga game, an interactive tablecloth, and a spin-off of the Undertable concept [19].

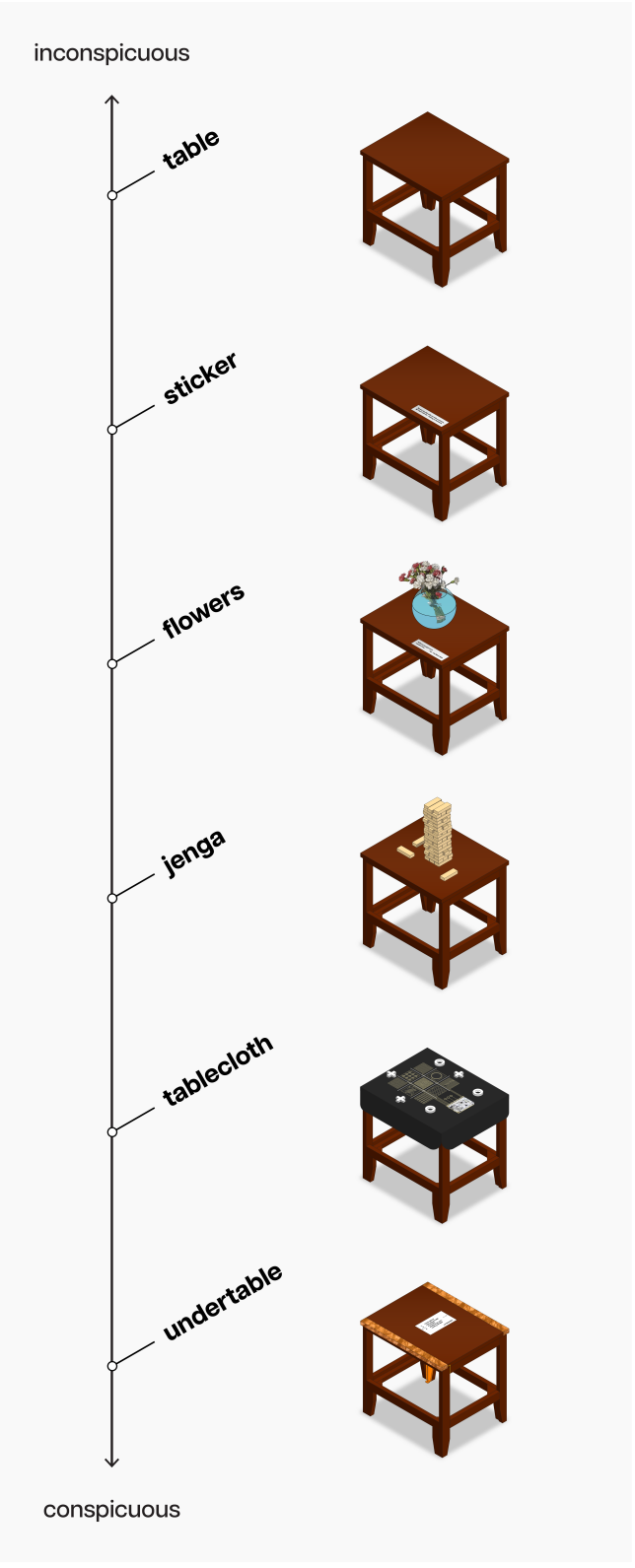


Figure 2: An overview of the Odd Invitations, incrementally scaling the invitation's conspicuity from inconspicuous to conspicuous.

These Odd Invitations vary in terms of how much attention they draw from passing beach-dwellers, where the coffee table alone represents the most inconspicuous end and the Undertable spin-off the most conspicuous. Nonetheless, they all take on a *reactive* posture [27], meaning that the initiative for interaction is always taken by the participant. The latter is to ensure participation remains voluntary while allowing us to study which design qualities afford social traction.

Deployment Protocol and Consent

The variants were deployed across Maroubra, Coogee, and Bondi beach, all located in Sydney's Eastern Suburbs. All six variants were deployed for a duration of two hours each, and took place between November 3rd and December 31st 2025, which is a warm summer period in Sydney. This included the Christmas and New Year's holidays, a time during which the beaches are especially crowded and festive.

As our study aimed to understand how Odd Invitations unfold in everyday life, we adopted an in-the-wild approach [31]. We did so to preserve spontaneity, ambiguity, and voluntary participation, which we consider integral qualities of Odd Invitations. In line with other exploratory research-through-design interventions in public space [4, 16, 32], we did not reveal the research intent prior to engagement, as doing so would undermine the phenomena that the study aimed to capture. (For a broader discussion on the ethics of seeking consent post-interaction we point to [35]). Instead, we obtained consent directly following each encounter. We realise such a study approach requires special attention to reflexivity on research ethics. We sought guidance on our protocol from the university ethics board, from which we received ethics approval [ERB-529, amendment ERB-110]. We also informed and received permission from the local beach lifeguards who manage the safety of beach-goers about our study, which was met with enthusiasm, on the condition that we would place the table outside of the designated 'swimming area', where people tend to crowd, marked between two flagpoles. The invitations are also designed to be reactive instead of assertive, so that participation is always voluntary and participants can freely leave the scene.

Deployments were conducted by the first author as part of a three-month research visit. For each deployment, he set up the table on the beach and then sat on a nearby staircase or placed his own beach towel within a safe distance to monitor the scene. He prepared a toolkit including the table as the carrier, props for the probe variants, tools for maintenance and improvisation, a book and beach towel to blend into the scene, and a camera and microphone for documentation (see Fig. 3). After a few minutes or when the interaction with the invitation ended, the researcher would approach the participants, debrief them about the study, ask for a semi-structured follow-up interview, and ask for participants' consent through a consent form. Consistent with field research conducted in public spaces, we did not ask for consent from passers-by who were only incidentally involved in the study. Interviews were voice recorded and asked about their first impression and interpretations of the table and their social habits when visiting the beach. The first author also took observational notes of how people interacted with the probes, and at times took pictures and videos with consent from participants (retrieved through the consent forms with the option to hide or make their face visible).

We interviewed 16 participants who directly interacted with the table variants, while many more engaged briefly as spectators or bystanders without being formally interviewed. Table 1 provides an overview of the interviewed participants per probe and location. We collected age and gender identity where the pace of the encounter allowed it, only to contextualise participants' accounts rather than make demographic claims. Recorded ages ranged from 18 to 46, with a mean of 27; gender data was collected for ten participants, of whom six identified as men and four as women. We assigned participant numbers (P1–P16) during analysis and use these throughout the paper in lieu of names.

Probe	Participants (#)	Location
table	not recorded	Maroubra Beach
sticker	none	Maroubra Beach
flowers	1-2, 3	Maroubra Beach
jenga	4-5, 6	Bondi Beach
tablecloth	7-9, 10	Coogee Beach
undertable	11-12, 13-15, 16	Coogee Beach

Table 1: Overview of the encounters during our deployments, including the corresponding paper sections, probe variants, participants (separated per encounter), and location.

Bondi Beach Attack — 14 December 2025

On 14 December 2025, two gunmen opened fire at Bondi Beach during a Hanukkah celebration, in which 15 people lost their lives[1]. By this point, four of the six variants had been deployed. The attack constituted an unprecedented change in the socio-cultural conditions of the study context, and required us to reassess our protocol before continuing. We consulted the university ethics board who had granted our original ethics approval for guidance on how to proceed. Their assessment addressed three aspects: that our research methodology itself remained sound; that the changed context was best assessed through the situated sensibility of the researcher present in the field; and that the researchers' own comfort and feeling of safety should also be considered a primary factor in the decision to continue the study. We decided to pause the deployments to observe how the social situation at the beach evolved. We subsequently moved our deployment site to Coogee beach, re-informed the local lifeguards, and sought their permission again before further deployment. After approximately two weeks of waiting, we deployed the last two variants, the interactive tablecloth and the Undertable spin-off, which took place during the Christmas and New Year's holiday period when beach crowds had returned to what felt like business as usual, with a festive leisurely ambiance, feeling appropriate for deployments. We treat the data from these two deployments with the post-attack context explicitly in mind, and provide more reflections on the ethical implications in our discussion.

[1] https://en.wikipedia.org/wiki/2025_Bondi_Beach_shooting



Figure 3: The researcher's toolkit brought during deployments.

4 Vignettes: Six Odd Invitations

We now introduce the six Odd Invitation probes in incremental sequence from inconspicuous to more conspicuous. The invitations encompass a variety between familiar and unfamiliar elements, technological and non-technological materiality, game-based interactions, and explicit and implicit instructions, all in an attempt to probe a broad understanding of what works and what doesn't in this particular setting. We present each probe as a short vignette, including a brief description of the invitation's composition and rationale, followed by a selection of deployment moments to portray how they were (or were not) engaged with. We write these vignettes in a reflective style based on the first author's situated observations, combining descriptive accounts of the encounters with selective first-person reflections on design decisions made in the field.

4.1 Just the table

The first deployment was just the table by itself, which simultaneously served as a pilot to get a feel for the beach culture. The initial idea was to leave the table with an integrated AirTag permanently at the beach as a 'common good', to observe whether and how people would appropriate it (Fig 4a+b). Using the AirTag, I could track where the table was each time I visited the site. I was curious whether people would temporarily use it and then leave it behind for others, and how they would appropriate the table.

I experimented with various approaches, leaving the table by itself in the open, or placing it near people's towels while they were surfing. Both led to some playful reactions. When a group of teenagers returned from surfing to their claimed spot, they were surprised to find a random coffee table waiting for them (Fig. 4c). They started using it as a prop to joke around, taking turns shaking it and sitting on it, draping their wetsuit over it to dry. After a few minutes they got bored and left it alone, so I decided to place it somewhere else again. This shuffling caught attention from other beach visitors, probably curious about this cat-and-mouse dynamic, but they did not approach me to ask what was going on and stuck to passively spectating how the situation would unfold.

When left unattended in the open, a group of adolescents passed by while strolling and started to pose around the table — one person sitting on it, another standing behind them like a proud parent, and a third taking a picture as if it were a portrait photo. Then, as they walked away, one turned around, ran back, and took the table with them to their spot. Returning from a swim, they playfully fought over who got to sit on it. They clearly enjoyed their newly acquired piece of furniture, making it their own by using it as a centrepiece for their beach hangout and placing accessories like sunglasses on it. After a while it became clear they would take the table home, so I decided to approach the group and ask for it back. They explained they thought it looked like a nice table, and thought someone left it ownerless, free to be taken.

4.2 Sticker

After discussing the first deployment with the local research team, it became clear that there is a common practice in Sydney of leaving furniture outside, mostly in front of people's houses, to signal it is up for grabs. This made me curious about what would change if

we made it more explicit that the table belonged to the beach. This is where the idea of incrementally scaling in conspicuity emerged. I decided to start with a rather minimal increment to probe the waters further, by adding a small sticker that explicitly signalled permission to be borrowed whilst remaining a slightly mysterious character to sustain enough ambiguity: *"borrow me, play with me, take a moment.. but don't nick me, I belong to the beach."* (Fig. 5c).

On a later hot summer day, the table was returned to the beach in front of a noticeably larger crowd. I placed the table on the open sand and watched. This time there was very little attention for the table. Some people passed by, noted the sticker, stopped for a while to read it, but then moved on again. By moving the table closer to the entrance of the beach, where it was positioned more directly in the walkway, I hoped to signal to new visitors that the table was freely at their disposal when choosing a spot to settle. This move helped more people notice the table and read the sticker, but still no one decided to take it. This lack of participation told me the sticker conveyed ownership and intent, but lacked a certain degree of strangeness to be inviting or engaging.

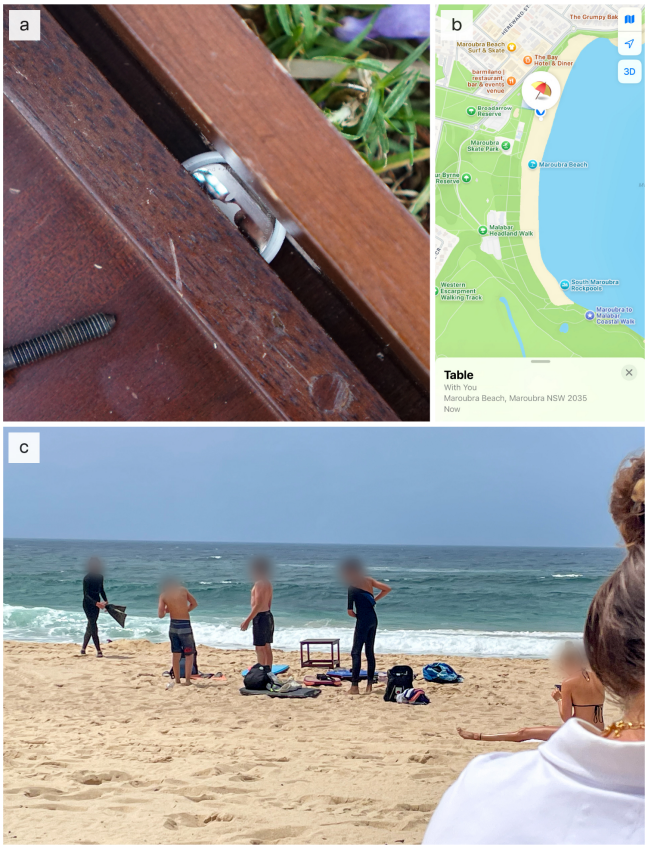


Figure 4: Installing an AirTag in the frame of the coffee table (a) to locate the table on the beach (b). A group of teenagers finding the table at their spot after returning from a surf (c).



Figure 5: (a) Assembling the sticker probe, (b) the table left alone by the beach, and (c) the sticker caption.

4.3 Flowers

To test a more conspicuous invitation, I placed a bouquet of flowers in a vase on the table. Similar to the previous variant, I added a small note to make the gesture for social interaction more explicit. This time I opted for a handwritten note instead of a printed sticker, to make the invitation feel more personal: *"pick one, and give it to someone else. xxx – the beach table"* (Fig. 6a). Based on my previous observations, I placed the composition close to the staircase where people enter the beach (Fig. 6b).

Immediately, two pairs inspected the table from a safe distance at the nearby staircase, leaned in to read the note, and continued their walk. Many groups who were either leaving or entering the beach also stopped to examine the situation, and one couple picked a flower and gave it to each other. This setup received noticeably more attention than the previous ones, yet not everyone who approached took a flower. At one point, a large class of primary school girls in uniform passed by as part of a school excursion. The table seemed to spark a curious discussion among the class as they walked by, until a group of three at the end of the line slowly stepped down the stairs to examine it up close. They each grabbed a flower, then ran back to rejoin their classmates and informed the teacher about what it was. As they walked by I overheard the teacher say: "Ohh, what a nice idea!". A couple of meters further along, the girls gave the flowers to two ladies sitting on a park bench (Fig. 6d+e).

Another interaction that stood out involved a young man (P3) who had been sitting with his friends a couple of meters away. He approached the table alone, read the note, took a picture of the setup, walked back, turned around, and then took a flower and another picture. As he returned to his friends, he got down on one knee in front of one of them and used the flower to mimic a proposal. They continued to play with the flower as a prop to joke around, and later used it as an accessory for self-fashioning by tucking it behind one of his ears.



Figure 6: (a) The flower vase with its corresponding note, (b) the table placed in proximity to the beach's walkway, (c) someone picking a flower from the vase, and (d) the girls giving a flower to the ladies sitting on a park bench (e).

4.4 Jenga

From the previous invitation, I learned that the visual expression and familiarity of the flower bouquet worked well to capture attention from a distance. At the same time, the interaction it afforded tended to drift away from the table, which risked weakening the role of the artifact as the social focal point. In an attempt to maintain a sense of familiarity while guiding engagement to take place closer to the artifact, I was curious to test a game as an invitation strategy. I chose Jenga for its visual recognisability from a distance, its light weight, and its simple rules that require little to no explanation. It is also not too competitive and rather embodied, leaning into the Homo Explorens manifesto's emphasis on bodily engagement as a way to create playful social exploration [22].

The immediacy of the Jenga game became apparent almost immediately. Already during the process of setting up, people nearby commented: *"nice idea!"* and *"wow, you even brought a table!"*. Before I even had the chance to sit down at my beach towel, a young man (P4) challenged me to a duel: *"the loser has to sprint into the water!"*. After playing a game with this enthusiastic participant (Fig. 7a), I returned to the original script of the study and observed the odd invitation on its own. A few moments later, a lone stranger settled in right beside the table with an air that did not feel easily



Figure 7: (a) P4 challenging the first author for a game, (b) spectators watching, (c) a mother and child playing a game of Jenga, and (d) a stranger 'blocking' the table.

approachable, which — whether intentionally or not — was enough to effectively block the invitation (Fig. 7d). After waiting half an hour to observe what would happen, I decided to move the table to a more exposed spot. This turned out to work: shortly after, a mother (P6) and her child stopped by to play a game (Fig. 7c).

4.5 Interactive Tablecloth

To increase the conspicuousness of the invitations slightly further, I adapted the interactive tablecloth prototype from our train study [18] to see how it would perform in this setting. The probe functioned as a soundboard, with a 3×3 grid of embroidered patterns that each played a sound through a portable speaker when touched. I implemented three soundboards that could be switched between abstract sounds based on the visual expression of the tiles, a drum kit, and a thematic soundboard that included humorous sounds related to Australian beach culture and Christmas-related tunes to play into the local festivities. An idle mode played a random tune from the current soundboard if left untouched for three minutes, revealing a glimpse of its interactive materiality and drawing attention from the surroundings. I also brought a set of 3D-printed tic-tac-toe blocks to anchor the invitation with familiarity in case the tablecloth's interactive affordances proved too concealed or ambiguous (Fig. 8b) –– a trick I learned during the train study [18].

Again, during the process of setting up, a group of swimmers approached to ask what the artifact was (Fig. 8a). It was not immediately obvious to them that the embroidered patterns were meant to be touched, but they were impressed with the fabrication once I demonstrated it. One of them expressed hesitation, concerned about an electric shock and whether it would work when wet from the water. When left by itself, it drew the attention of passers-by — for instance, a child who ran by, stopped to examine it, took a peek under the table, and carried on again (Fig. 8d). There was a gap

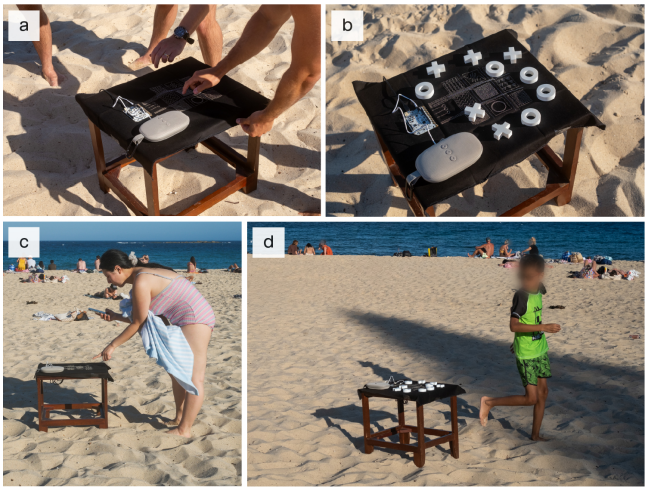


Figure 8: (a) A group of swimmers making sense of the tablecloth, (b) additional tic-tac-toe blocks for a supplementary layer of familiarity, (c) a participant trying out the soundboards while taking a picture, and (d) a child running by, stopping to examine the tablecloth.

where no one engaged directly with the setup, until a spectator (P7) who had been curiously observing from the boardwalk approached to ask what it was: *"I honestly thought you were gonna like pull out a board at first and start playing music or something. And then the fact that you set it up and just like walked away and let it be, raised some questions in my head."* (P7). This interaction turned into a half-hour interview, during which multiple groups of spectators approached to watch from close by. P7 even invited one group she had noticed observing for a while to come and check out the installation, and recorded a social media post about the design.

4.6 Undertable

Next, I translated the Undertable into a beach setting [19] to test how how a more intimate interaction concept behaves between the Swedish party and library setting of the original study and the beach culture in Sydney. The design draws on the strong concept of 'bare-skin connection between strangers' [25], introduced in the Mediated Body [23] and later remade through the Undertable [19]. While the original Undertable responds with airflow from underneath, this version used a tilting movement as actuation, since airflow would likely go unnoticed on a windy beach. The table began tilting and dangling when people touched each other while holding or leaning onto conductive strips attached to the edge of the tabletop. As noted in Hendriks et al. [19], the interaction concept needs to be made explicit, so I added a similar set of instructions via another handwritten note (Fig. 9a). Similar to the tablecloth invitation, I implemented an idle mode in which the table would move on its own for 30 seconds if untouched for three minutes.

This time, I mounted the interactive components to the table in advance so that it could be placed on the beach without drawing too much attention during set-up. Only one person seemed to notice, read the note, glanced at me, and then turned away again. Moments later, a group of three approached curiously but refrained from touching. When asked in a follow-up, they explained they had understood the note but were afraid of an electric shock from the copper tape. Another person stopped for at least 30 seconds, visibly contemplating, and then moved on. Then two siblings (P11 and P12) noticed the table and began expressively inspecting and interpreting its ambiguous presence. One read the note out loud; together they lifted the table up to look underneath (Fig. 9c). P11 was very insistent: "come on [sibling's name], shake my hand!", holding one edge of the table. P12 never touched it — as he mentioned in the interview, he had noticed the wires and was too scared. Another moment that stood out was a spectator who had been following the scene from their beach towel, and eventually approached the table to snap a picture before returning to their friend to show what it was from the safety of their phone.

This day was particularly crowded, likely in part because of the festive time of year. A participant also mentioned that a live music performance was about to take place on the nearby boardwalk (Fig. 9b), which seemed to draw additional traffic through the area. Of the five interviewed participants, only one had noticed the table's tilting motion in its idle state.



Figure 9: (a) the Undertable probe, (b) a live performer drawing a crowd, and (c) siblings lifting the table to inspect it from underneath.

5 Analysis: Qualities of Participation

We applied the Participation Gestalt framework as a lens to characterise the participation gestalt that emerged across our six Odd Invitations. Our analysis was deductively structured through PG, but carried out in a reflexive interpretative style inspired by Braun and Clarke [2]. We used PG's qualities as sensitising concepts through which to compare the six Odd Invitations, while discussing how these qualities could help us articulate the encounters and where they needed adaptation for the particularities of Odd Invitations. While all authors were involved in the design process, only the first author had the lived experience of how the invitations unfolded in situ. The second and third authors joined the analysis to introduce critical distance. We followed Dalsgaard et al. [7]'s guiding questions (Table 2) per table variant and overlaid our individual interpretations from the data to identify consistencies and divergences. While it was not our aim to generate a separate set of themes alongside PG, this process also surfaced insights that were not captured by the original PG qualities, e.g. the role of social permission, the daring involved in crossing into participation, and the nuanced ways in which conspicuity made each invitation noticeable or socially approachable. These insights inform the discussion that follows, where we revisit PG's qualities for Odd Invitations and propose conspicuity as a pre-participation quality. During these discussions we concluded the fifth quality of *persistence* was not directly activated by our selection of Odd Invitations, as none of them included features that allowed for leaving 'social traces' for upcoming participants. Thus we leave *persistence* out of our reporting here and return to this quality in Sec 7.1 with a revisited interpretation for Odd Invitations. Below, we report on the first four PG qualities *expressivity*, *investment*, *exposure*, and *sociality*.

Expressivity, the degree to which participants expressed themselves through interaction [7], varied considerably across the six variants. The flowers were appropriated as a platform through which participants expressed themselves in small performances of social acts, such as giving a flower to a stranger, dropping to one knee and staging a mock proposal, or wearing one as a self-fashioning accessory. In the Jenga setup, people expressed themselves through the activity of playing a game, some banter on the side, but at the same time it kept interaction within the familiar frame of a known game. The tablecloth offered multiple channels for expression, through the sound triggers, tic-tac-toe blocks, and conversation, which stimulated more creative appropriations of the system. P7, who initially thought the researcher was a musical performer and the tablecloth their instrument, came up with ideas to create a soundboard with ad-libs[2], and a game in which people have to guess which music artist each ad-lib belongs to. The Undertable, while more conspicuous in appearance, offered fewer means for participants to express themselves through the artifact (essentially triggering a response only requires holding the table and the other person). Yet, it created the most visible commotion among participants expressively interpreting its ambiguity.

[2]"Ad lib" (short for Latin ad libitum, meaning "at one's pleasure") in music refers to a performance technique where a musician or singer improvises, adding spontaneous vocalizations, lyrics, or melodic variations to a song, typically used in rap music as a means of personal trademarking or for shout-outs.

Investment, the time and effort participants committed to an interaction [7], increased noticeably with the conspicuity of the invitation. Arguably, we saw the highest investment in the first deployment, where people committed to taking the table home with them, though this falls outside the scope of our intended study. The flowers afforded only a brief time window of participation by simply taking a flower and giving it to someone else, leaving little incentive to linger. The Jenga game was better in sustaining a longer time window for interaction, ultimately bounded by how long it takes for players to topple the Jenga tower. The tablecloth and Undertable generated the deepest investment, although in different ways. P7 spent considerable time exploring the tablecloth's features, testing each sound trigger, and went as far as recording a social media post about the setup. The Undertable, despite its conspicuous aesthetic, yielded varying forms of investment. Some participated at length, while others disengaged quickly, most likely due to their uncertainty in what the artifact was asking of them. P15 explained they thought it was a psychology experiment, and P11 interpreted it as a sort of trust exercise. A recurring pattern across the interviews was that perceived permission to interact largely influenced how much participants were willing to commit. P7 put it plainly: *"I think people really want to be mindful of other people's property ... if you had a sign that was a clear invitation — it doesn't have to be long, it can literally be two words — I think that would incline more people to allow them to explore their curiosity."*

Exposure, the degree to which participants are publicly visible during engagement [7], was shaped by both the table's presence in the open setting and the nature of each invitation. The placement of a table on an otherwise furniture-less beach was a constant factor across all deployments, consistently and immediately visible to beach-goers. The contrast of having a table at the beach was flagged as unusual and striking by almost every participant. P11: *"a table being in the middle of the beach… it was just very out of place."*, P3: *"wow that's a really strange place to put a table."*, and P2: *"It looked like a funny thing at the beach, and I was like, why not? Looks fun."*.

Once interaction began, the variants differed considerably in how visibly participation was staged for others. The flower invitation was a clear outlier here. By directing participants to give a flower to someone elsewhere on the beach, it moved the interaction away from the table and dispersed social visibility across the scene rather than centring it. The Jenga game, on the other hand, kept participants seated and visibly engaged at the table for the duration of a game. This visible interaction was then able to draw in spectators who observed from a distance although they rarely joined as participants. Participants themselves were also aware of this public visibility. While interacting with the tablecloth, P7 noticed a nearby spectator watching the encounter unfold: *"while we've been talking, I see this guy over here in these shorts that keeps staring. And I'm assuming he's probably like, "I wonder what that's about"."* The Undertable created the most exposure of all as it afforded a more embodied and thrilling type of engagement from participants. This was most evident in moments such as P11 and P12 lifting the table, and their vocal and dramatic reactions, drawing the attention of nearby beach-goers through their visible surprise and commotion.

	To what degree..
Expressivity	do participants express themselves during the interaction with the installation?
Investment	do participants invest their time and effort in the installation?
Exposure	are the participants exposed in the interaction with the public installation?
Sociality	do participants engage in interaction with other participants during the interaction with the installation?
Persistence	do participants leave traces accessible to others?

Table 2: Dalsgaard et al. [7]'s guiding questions for each quality of the Participation Gestalt framework.

Sociality, the degree to which participants interacted with one another during engagement [7], varied most visibly across the more sustained variants. The Jenga game drew spectators who commented from a distance but did not feel invited to join. P4's friend joined briefly to watch and chat but could not find a natural entry point into the game. The tablecloth's mysterious gestalt lent itself better to drawing others into the interaction. P7 noticed two strangers watching from nearby and invited them into the experience. P8, one of those strangers, later admitted he had assumed P7 was somehow part of the installation: *"You're so involved in it [to P7]. I thought she has to be a part of it. [to researcher]"*. Similar to the Jenga game, the Undertable also structurally depended on at least two people to participate. The note on the table explicitly mentioned this need, which either made it more accessible for people that approached in groups to engage, or more rarely, encouraged people to invite a stranger. P11 reflected on one such moment: *"I got to speak to that stranger who walked by and he came over and took over my brother's position ... something so bizarre and abstract in such a space actually brought something really meaningful and lovely."*.

It is also worth noting how participants and spectators used their phones in contrasting ways. Some participants used them to document and share the experience, e.g. the group who staged portrait photos with the coffee table, P3 who photographed the setup to share with friends, and P7 who recorded a video with the researcher to post on social media. Another phenomenon we observed was how the phone was used as an instrument to avoid sociality. Goffman [15] refers to this as *involvement shields*: a means through which people use physical objects or behaviours to block social interaction, hide embarrassment, or manage privacy in public spaces. We observed this with one spectator who used their phone as a barrier, subtly taking a picture from a safe distance and returning to their spot to show it to their friend, thereby avoiding any direct engagement with the table.

6 Discussion

The six deployments and their analysis through PG surface two broader implications for design research. The first is theoretical, prompting us to extend PG's vocabulary, applied in the context of Odd Invitations, in two directions. First, by proposing *conspicuity* as a pre-participation quality that accounts for how spectators are invited into participation before engagement begins, and second, by reframing the socio-cultural setting as temporally dynamic rather than fixed. The second contribution is methodological, reflecting on the design researcher's positionality when studying Odd Invitations in the wild, and on the ethical responsibilities that come with placing open-ended social invitations in everyday public space.

7 Extending Participation Gestalt for Odd Invitations

The Participation Gestalt framework offers a useful lens for analysing participation in public interactive installations, and proved compatible with Odd Invitations' epistemology in many respects. Yet, applying PG to our deployments also revealed frictions that point to the particularities of Odd Invitations. In PG's original context of larger-scale and more curated digital art installations, participation is implicitly assumed, and the entry into participation is perhaps of lesser focus. For Odd Invitations, participation cannot be assumed, and the primary design concern is arguably not only what happens during participation, but how participation becomes possible in the first place. This pre-participation threshold is not explicitly foregrounded in PG's original vocabulary.

Figure 10 therefore illustrates our mental model of Odd Invitations as a more situated extension of Dalsgaard et al. [7]'s representation of PG. We keep a similar visual language to make the continuity with PG explicit. Compared to Dalsgaard et al. [7]'s model, we depict participation gestalt as an encompassing bubble that includes the artifact and participant(s), and unfolds within a *temporal* socio-cultural setting. Odd Invitations operate *outside* the PG bubble, at the intersection between the temporal socio-cultural setting and the participation gestalt, acting as a mediator that recruits spectators to participate in the first place, and only once that threshold is crossed does the participation gestalt begin to form. This model leads us to two extensions: revisiting PG's existing qualities for Odd Invitations, and adding *conspicuity* as a pre-participation quality shaped by a temporally dynamic socio-cultural setting.

We recognise the limitation of representing a dynamic and relational concept in a static diagram. By placing the temporal socio-cultural setting around the participation gestalt, the diagram may make it appear more like a container than we intend. As we will demonstrate, the setting does not merely frame participation from the outside, but plays an active role in how the artifact becomes noticeable, how spectators interpret it, and how participation becomes socially possible. In this sense, it could also be conceptualised as part of the participation gestalt itself. The diagram should therefore be read as a supplementary entry point into the discussion points that follow, rather than a complete or definitive representation.

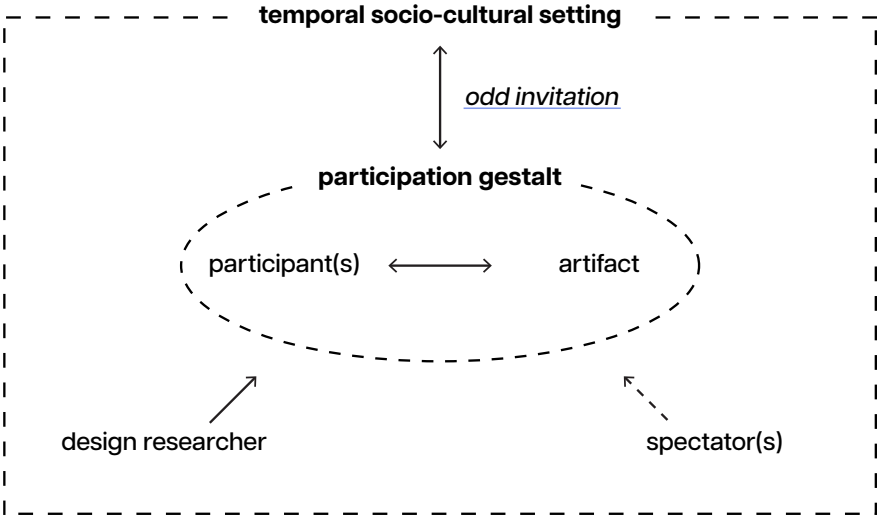


Figure 10: An extended overview of Participation Gestalt [7] for Odd Invitations.

7.1 Odd Invitations to Trigger Participation

When applying PG's five qualities to our data, we found that the vocabulary as defined by Dalsgaard et al. [7] could be mapped onto our encounters but often felt slightly constrained or awkwardly stretched. The definitions are carefully chosen and cover a broad spectrum around the participant's experience *during* an interaction with an installation. Where the framework needed to be re-situated for the scope of our study is in its assumption that interaction is taking place, which for Odd Invitations needs to be instantiated through the design. Although PG's current qualities do not explicitly foreground for how spectators become participants, we found that they can be reinterpreted through the lens of Odd Invitations to better articulate how an installation attracts engagement in the first place. Below, we illustrate our revisited interpretations of the PG qualities based on our insights from deployments at the beach.

Expressivity, in PG's definition, focuses on how an installation or system supports participants to express themselves during an interaction. Following this narrow definition, we felt rather constrained in our analysis. Because participation is not guaranteed in Odd Invitations, the artifact too needs to possess certain qualities of expressivity to be able to attract an audience. The flowers conveyed warmth and geniality, the Jenga game proposed a playful challenge, the tablecloth communicated humour and material novelty, while the Undertable offered a more sensational or thrilling attraction. We therefore argue that the definition of expressivity should be relaxed and expanded beyond the participant. Here we draw on Bruns et al. [5]'s work that builds on the PG framework and proposes expressivity in interaction that considers not only how participants can express themselves towards a system (bodily expression, speech), nor how the artifact may express itself (interaction modalities, actuation), but rather the interplay between them.

Investment in PG describes the time and effort participants invest in the installation. From an Odd Invitations perspective, investment is also something that happens *before* interaction begins. It concerns the commitment a spectator must summon to approach the intervention and role with in its concept. As we observed in our data, this is a matter of *daring* to interact, for instance by mustering enough courage to give a flower to a stranger, to touch the copper strips connected to an unfamiliar object, or to challenge a stranger to a game. P11 reflected on how this daring-ness became a rewarding interaction for him: *"The risk it brings and the kind of how it stands out brings more personality and memorable, you know, memorable moments."* This resonates with Benford et al. [1]'s account of uncomfortable interactions as generators of meaningful experience — the risk of a potentially awkward interaction is part of what makes crossing it feel exciting and worthwhile.

Exposure in PG focuses on how the participants are exposed during the interaction, which is also highly applicable to Odd Invitations. If participants' interaction with the installation is visible to others, it may create a snowball of curious spectators becoming participants through the honey-pot effect [39]. In order for this effect to kick into play, however, participants need to find the table in the first place. In Odd Invitations terms, exposure is therefore also concerned with how the artifact stands out in the context to draw enough attention for people to first notice and then engage with the invitation. This is where defamiliarisation as a design strategy comes in, which can be achieved by creating enough contrast to make the artifact stand out from the socio-cultural setting it is deployed in. The table's defamiliarising presence was noted in nearly every interview, often as the primary reason for engaging: *"I saw the table and I was like: wow that's a really strange place to put a table."* (P3).

Sociality in PG describes the degree of interaction between participants during engagement. For Odd Invitations, we find it productive to reread this quality as *accessibility for engagement*: how open the invitation is to strangers and bystanders who wish to join an interaction already in progress. In Goffman's terms, this concerns the transition from unfocused co-presence into a focused encounter [15]. The contrast between the Jenga and tablecloth probes illustrates this clearly. Jenga's familiar rules implicitly impose a two-player structure that spectators observed curiously but did not feel invited to interrupt, whereas the tablecloth's ambiguity created a more open invitation for interpretation that newcomers could join without needing to 'break into' an established game.

Lastly, ***Persistence*** in PG describes whether participants leave social traces at the artifact, accessible to future visitors. While we did not design our six variants with this in mind, persistence in its original sense was absent from our encounters. Nonetheless, we did observe a certain *persistence* that played out as 'ripple-effect' in how the invitation spread through social networks rather than the artifact itself. Some examples are P16 who wanted to show her husband after he returned from his swim, and P7, a social media marketer, who recorded a short video post about the tablecloth to share with her followers online. In this sense, persistence in Odd Invitations may operate less through traces left on the artifact and more through participants carrying the invitation onward through conversation, recommendation, or sharing. Nonetheless, the lack of Dalsgaard et al. [7]'s *persistence* in our selection of invitations is surely a limitation in our study, and we can envision ways to design Odd Invitations that optimise for leaving social trails for upcoming participants. For instance, we had the idea to leave a typewriter on the table with an initial text prompt which beach-goers could expand on, leaving incomplete parts of a story through which following participants could accumulatively expand on each other's writing.

7.2 Conspicuity: A Pre-Participation Quality

We therefore propose *Conspicuity* as a pre-participatory quality: the degree to which an Odd Invitation makes itself legible as an invitation within its socio-cultural setting and attracts a spectator's attention prior to engagement. If we return to our diagram in Figure 10, it is the quality that operates at the outer border of the participation gestalt bubble, functioning as a mechanism to pull in spectators towards the artifact, and potentially turn them into participants.

Although we present conspicuity as an incremental scale for clarity, it should not be mistaken as a dial that can simply be turned up to "maximise" participation. What our six variants show is that conspicuity differs not only in degree but also in character — the qualitative way in which an invitation makes itself known and positions itself as approachable within its context. The flowers communicated through *warmth and cuteness*, as it was easily visible from a distance and culturally associated as a gesture of kindness. The Jenga game managed to achieve attraction through its *familiarity*, communicating the possibility of play without requiring too much interpretive work. The tablecloth manifests a certain degree of conspicuousness through its *novelty and humour*, by being visually ambiguous enough to provoke curiosity, and once triggered, playful enough in its beach-themed soundboard to disarm the social risk to approach. The Undertable leaned into a more *sensational and daring* form of conspicuity. Its ambiguous materiality, with copper-taped edges and tilting movement presented itself as a more challenging invitation, which for those willing to cross it generated the most intense responses. The table alone and the sticker variant, while the least conspicuous in comparison, function as a certain baseline. Conspicuity through displacement alone — simply placing an object in a context where it is out of place — proved surprisingly effective at drawing attention, but not sufficient to generate or sustain participation without additional social scaffolding. The sticker is also particularly telling as it was the only case that did not manage to initiate participation (Table 1). Communicating explicit permission through text was not enough in comparison with the material or visual strangeness in the more conspicuous invitations. People understood what it was asking and walked on, suggesting that being permitted to engage is not the same as being *drawn* to engage.

One further dimension of conspicuity that our data surfaces is the role of the spectator in amplifying it. Several of our most conspicuous moments were not created by the artifact alone but by participants whose engagement became its own attractor, such as P11 and P12 lifting the Undertable into the air and calling out to each other, or P7 waving bystanders over to experience the tablecloth, and the school group's animated flower discussion drawing the attention of the teacher. What we take away from these is how conspicuity does not only need to be a quality embedded into the artifact, but can also be the result of participants' actions around the design. In this sense, conspicuity and the honeypot effect [3] could be seen as complementary mechanisms, where conspicuity creates the initial condition for spectators to approach, and the honeypot effect sustains and compounds it once participation is established.

7.3 Socio-Cultural Setting as Temporally Dynamic

The second extension concerns the role of the socio-cultural setting within PG. PG includes the socio-cultural setting as a constitutive part of its definition: *"the unified perception and experience of participatory qualities as they unfold through interaction with the system in a given socio-cultural setting"* [7]. Yet in practice, the framework reflects this context implicitly within the five PG qualities themselves, treating it as a given backdrop that is essentially fixed during the entire deployment. Our study suggests that, in the case of Odd Invitations deployed in the wild, the socio-cultural setting took on a more temporally dynamic and active role, as unpredictable contextual conditions continuously influence how the invitations are perceived. **We therefore propose that the socio-cultural setting for Odd Invitations should be seen as *temporally dynamic* rather than fixed.**

Our initial intention was to settle on a specific type of socio-cultural setting as a somewhat generalisable context for comparison with our previous train study [18], festival / party [19, 21, 23], and library environment [19], assuming some degree of consistency

in social etiquette and behavioural norms that are prevalent in what a place elicits in people. This proved to be a rather naive assumption in hindsight, as our study revealed that even within a single deployment site, the socio-cultural setting was continually reconstituted by temporal influences.

These dynamics can be spatial and fleeting, such as the uninviting stranger blocking the Jenga table, or a tipsy crowd drawn by an unanticipated musical performance nearby. They can also be seasonal, as the Christmas and New Year's holiday period brought a noticeably more festive and permissive social atmosphere to the beach, which visibly increased engagement with the later variants. At a more extreme scale, they can be shaped by national or global events, as was the case with the Bondi Beach attack. Participants who interacted with the Undertable, the most technologically conspicuous variant, explicitly connected their hesitation to the attack. As P11 reflected: *"... thinking of the events of last week. I was like, WAHHH, when I saw the wires, I thought crisis, which is probably saying something about how I need to heal from the events."*.

This shows that the same material intervention can carry different meanings depending on when it is encountered. The flower bouquet, for instance, read as a "sweet" and attentive gesture of sociality could be read as an expression of grief and condolence after the attack. This matters for Odd Invitations, because whether an invitation becomes approachable is not only a function of its design, but also of the temporally shifting conditions in which it appears. We therefore argue that making this temporal dynamic explicit in PG is essential for applying the framework to everyday in-the-wild interventions where contextual stability cannot be assumed.

8 Incremental Probing in the Wild

Beyond re-situating PG for Odd Invitations, our study also offers a methodological contribution through an incremental probing approach for designing Odd Invitations in unfamiliar socio-cultural settings. Our deployments show that such probing is not just a matter of varying artifacts, but also of making situated decisions in the moment. This largely depends on how the researcher reads the social conditions as they unfold, responds to them in real time, and navigates the ethical responsibilities that come with intervening in everyday public space. We reflect on two methodological aspects that we see as integral components of this process: the positionality of the design researcher and the ethical care this requires.

8.1 The Researcher as Part of the Odd Invitation

Returning to the diagram in Figure 10, the design researcher takes on a specific position in our extended model. We placed the design researcher within the temporal socio-cultural setting, outside the participation gestalt, but with an active relationship to the unfolding gestalt. This is not a neutral position at all, as the design researcher takes on multiple roles, such as deploying the artifact, monitoring the scene, making real-time adjustments based on what they observe, and continuously navigating the boundary between when to observe and when to intervene. This matters methodologically because, as we apply it here, incremental probing does not unfold through the artifact alone, but through the researcher's situated judgment of when to adjust, when to step back, and when to participate in the social situation they are studying.

In practice, this boundary proved to be messier than anticipated. When the researcher would be seen setting up the table, or documenting the table through photography, people would be quick to jump in to comment, ask what is happening, or to challenge the researcher for a game of Jenga himself. Our intended research protocol was for the researcher to step back and not get involved in participation themselves. Yet, in the lived experience of these situations, it felt against the ethos of the study to reject a participant's invitation for social interaction. When participants approached as a group it was easy for the researcher to take a step back and to let participants explore the Odd Invitation by themselves, but when a lone participant approaches the researcher, it felt rude to turn their invitation down, so the first author made the choice to step into the interaction with the participant.

For the study's internal consistency this is admittedly messy, but it is also a realistic and recurring feature of this kind of in-the-wild work that is hard to design around. Within Odd Invitations research, however, this may be beneficial. In two sessions, when P4 and P7 approached the researcher alone, the researcher's participation created enough traction to trigger a honeypot effect. In a way, the researcher is the Odd Invitation championing for the installation and the opportunities for social interactions it creates. We made a similar observation in our previous train study [18], where the researcher getting caught in action also created opportunities for people to get curious and take on a role as 'wingperson'.

Schön [33]'s notion of the *reflective practitioner* feels apt here, as the researcher reads the situation as it develops and lets that interpretation shape what happens next. In our case, this played out quite literally across the six variants. When the table risked being stolen, we added the sticker; the sticker attracting attention but not engagement led to the flowers; the flowers drifting the interaction away from the artifact led to the Jenga game to recentre participation around the table. None of these moves were planned in advance. Seen this way, **incremental probing moves beyond a sequence of prototype variations and becomes a reflective and situated method for tuning Odd Invitations to context.**

8.2 On Navigating Ethics in the Wild

For incremental probing, ethics is not external to the method but constitutive of it, because the same ambiguity that makes Odd Invitations socially generative also makes them ethically sensitive to deploy in the wild. Part of their appeal lies in walking the edge between a potentially exciting and socially rewarding encounter, and one that may become socially awkward if misjudged. This tension becomes especially pronounced when deployed in the wild, where the social meaning of an invitation cannot be fully controlled in advance. This puts more responsibility on the researchers in the moment, as they need to make situated judgments about what feels appropriate, intrusive, or potentially unsettling. We therefore reflect openly on how we handled these tensions in practice, not to present a perfect model, but to contribute to a broader discussion on the practical ethics of probing Odd Invitations in everyday public space.

While institutional ethics approval sets the conditions for in-the-wild research, it cannot anticipate what researchers will encounter

once in the field. Rather than relying solely on institutional protocol to determine what is appropriate, we chose to ground our ethical footing relationally by corresponding with the local beach lifeguards as a situated authority managing the safety and social wellbeing of the place[3]. This proved to be one of the more rewarding ethical decisions of the study, as it opened a genuinely collaborative relationship. Beyond their (informal) permission and practical guidance, they became curious observers themselves, keeping an eye on the table to see what would happen. When possible, we would encourage future researchers conducting in-the-wild studies of Odd Invitations to seek out this kind of situated, relational permission alongside institutional approval, as local authorities often have a more intimate reading of the social dynamics of a place, and might even support the research with ideas or available resources, potentially transforming a unilateral research act into something more like a shared one.

The attack itself raised ethical questions about whether continuing the study was responsible toward a community still in grief, toward participants who might be more vulnerable to unsettling encounters, and toward the researcher's own comfort. When we consulted the ethics board, their advice proved instructive. They affirmed the methodology remained sound, but also recognised that the social context had changed and was best assessed through the situated sensibility of the researcher in the field, and emphasised that the researcher's own sense of safety should be treated as a primary factor, not an afterthought. We find this an honest acknowledgement of what institutional ethics can and cannot do. In practice, for us this meant pausing deployments to monitor how the social situation at the beach evolved, relocating to an alternative Sydney beach, re-informing the local lifeguards, and seeking their permission again before continuing, and taking enough time for ourselves to attune to the changed social climate and regain confidence that continuing was appropriate.

Then, at a finer grain, the study continuously involved what Spiel et al. [36] call *micro-ethical* judgments: the moral and ethical decisions that must be made by the researcher in situ. This is highly relevant when studying Odd Invitations as they are typically deployed as a stand-alone installation in an unpredictable space and rely on a degree of ambiguity to generate curiosity, play, and surprise. We intentionally designed with that ambiguity so that visitors can always choose to engage out of curiosity or simply walk away — and in nearly all cases, they did one or the other. Nonetheless, there were a few moments where we felt the ambiguity of the situation risked becoming socially uncomfortable or inappropriate. For instance, when participants felt slightly embarrassed after the researcher asked the table back. In another instance, we noticed a mother being cautious for her children to get near the Undertable, so we immediately debriefed her about the study to remove uncertainty and reassure a sense of clarity and control over the situation. In our study, this made the researcher's presence important, as he could monitor the scene and step in when needed. These in-situ decisions can be quite challenging to navigate and demand a researcher's sensitivity to the lived context, being responsive and alert, but also a certain amount of social finesse. No ethics document can anticipate these, nor should we expect one to, yet they remain consequential for both the researcher-participant relationship and the integrity of the data. For this reason, **ethical sensitivity should be understood as part of the reflective practice of incremental probing.**

[3]It is worth noting that the lifeguards were among the first responders at the Bondi Beach attack in December 2025, carrying wounded people to safety on surfboards

9 Conclusion

This paper set out to explore how Odd Invitations can be designed to mobilise social traction in an everyday public setting. Through a research-through-design study involving six lo-fi Odd Invitation variants deployed at beaches in Sydney, we probed how progressively scaling the conspicuity of an invitation shapes the threshold between spectator and participant. By analysing these encounters through the Participation Gestalt framework, we arrived at two contributions to design research.

First, we propose *conspicuity* as a pre-participation quality that extends PG's existing vocabulary for Odd Invitations. Where PG's five qualities characterise participation once it is already taking place, conspicuity addresses the moment before — how an invitation becomes approachable enough to cross the threshold from passive noticing to active engagement. Our incremental probing approach offers designers a structured method to explore this tipping point early in a design process with sensitivity to the socio-cultural setting it is designed for, before committing to a more fully realised intervention.

Second, we argue that the socio-cultural setting in PG needs to be understood as temporally dynamic rather than fixed for Odd Invitations. Our study was marked by an unpredictable rupture — a violent attack at one of our deployment sites — that made this point unavoidably concrete. This made us reflect on how context is better understood not as a stable backdrop but as an active condition that continuously shapes how designs are perceived when placed in public settings. Designing Odd Invitations for everyday public space therefore requires ongoing attunement to the shifting context of deployment.

Together, these contributions extend the application of PG theory for analysing Odd Invitations in everyday settings, while offering practical grounding for designers working with Odd Invitations beyond curated or festive contexts. Future work could examine whether these extensions also hold for PG more generally, examining whether *conspicuity* and the temporally dynamic socio-cultural setting are particular to Odd Invitations encountered by chance, or whether they also matter for participation in public interactive installations more broadly.

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