

# Mapping the patterns of gift giving at Burning Man

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## Extended Abstract

Burning Man is an annual event that takes place in the temporarily constructed city of Black Rock City (BRC), north of Reno, Nevada. It is an art and community-centered experiment grounded in such principles as decommodification, leave no trace and community cooperation. Devoid of cell service, money and outside of the standard rhythm of urban life, can the 80,000-person event serve as an *in-situ* laboratory to study how human sociality functions in harsh, low-information, environments[2]? Empirically studying Burning Man could inform the social sciences: the ephemeral and prototypical nature of its urban layout can inform urban planning. Furthermore, as decentralization is seen as an increasingly attractive option for governance, and social networks, learning from Burning Man's successes could give insight into how we design such social systems for decentralization and serendipity [1].

There is a legacy of computational social science at Burning Man. In a large-scale longitudinal study, Yudkin et al find that self-reported transformative experiences at Burning Man are common, increased over time [3]. In 2018, researchers conducted a field experiment at Burning Man, mapping the voyage of 15 vessels across the social networks of the desert. They found that unlike normal life, the social networks of Burning Man are configured more for serendipity than efficiency [2].

Building on and scaling their work, as a pilot study we deployed 600 vessels at the 2022 Burning Man event to understand where and when gifting occurs. People annotated these vessels with their name, the time, their camp, and their location before gifting the vessel to another person. Each vessel contained a booklet for annotation, a pen, and a matchbook to conduct a short gamifying ceremonial ritual. fire ritual (see Figure 2, left). The last participant of each vessel could drop the vessel of in a bin at lost and found, or email us the booklet information if they still had it. We also partnered with the BRC Census to conduct a follow-up survey. This pilot study provides critical evidence for designing a field experiment for next year in a harsh social environment.

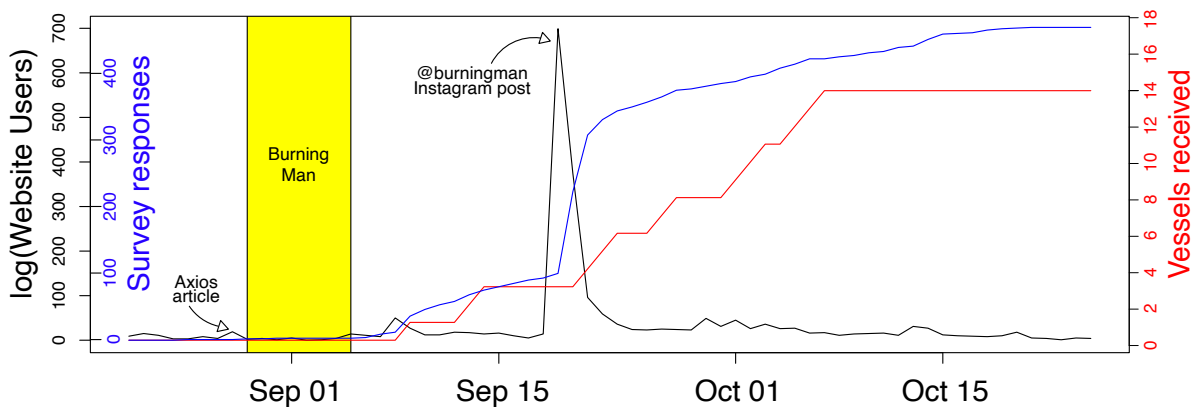


Figure 1: Response rate of vessels, survey and website views over time

We retrieved 14 vessels with 49 total handoffs, with an average of 3.42 handoffs per vessel (see Figure 2, right). We found that participants gifted the vessels near their own camps (0-0.1 miles from camp), in their local neighborhood (0.2-0.4 miles), or around 0.8 miles from camp. The bin that people dropped vessels off in was loaded into a freight container, which will allow us to conduct a hold-out analysis when we access them next year.

N=470 people completed the follow-up survey. Of these 470, 105 encountered or heard about the experiment at Burning Man (36% heard about it more than once) and 57 actually participated in the experiment. We asked those 57 about their experience receiving/giving the vessel. They had mean age = 47.1 (sd = 13.6), and 91% had been to Burning Man before 2022 with an average of 6.1 times total. We found that receiving a vessel was 37% more likely to come from a stranger than giving away a vessel. People who received a vessel from a friend were more likely to give the vessel to a friend (75%), versus people who received a vessel from a stranger where more likely to give the vessel to a stranger (63%).

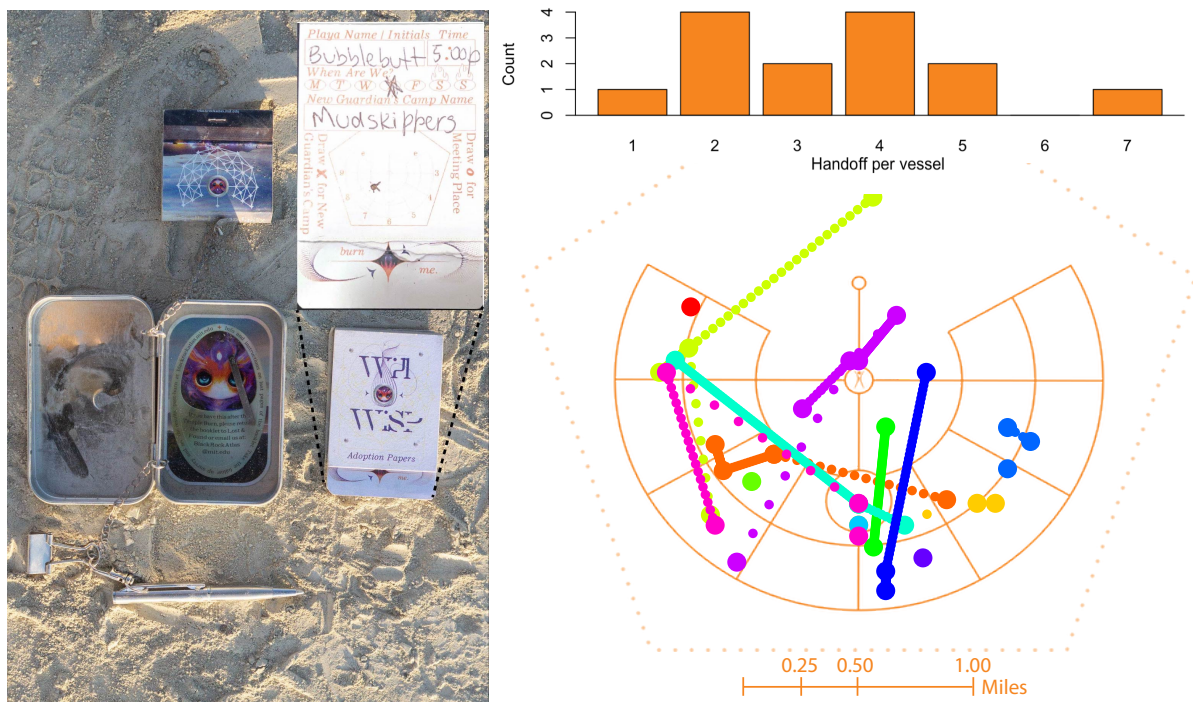


Figure 2: Left: Vessel components. Right: Distribution of handoffs (top) and spatial distribution of handoffs (bottom).

## References

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- [3] Daniel A Yudkin et al. “Prosocial correlates of transformative experiences at secular multi-day mass gatherings”. In: *Nature communications* 13.1 (2022), p. 2600.