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Digital mandalas: Communication and authentic human interaction in reddit's r/place platform

William Pendergrass, *Kennesaw State University*, wpenderg@kennesaw.edu

Joseph Compomizzi, *Florida Atlantic University*, jcompomizzi@fau.edu

David Scibelli, *Winthrop University*, scibellid@winthrop.edu

Matthew Szarmach, *The Pennsylvania State University-New Kensington*, mxs6493@psu.edu

Abstract

This study examines the social-digital behaviors of online communities through the experience of building an online mandala. The article provides historical background to ancient practice of sand painting, or mandala, as a social phenomenon through its evolution to online application and participation via the social media app, Reddit, and their r/place digital mandala creation experiences hosted in 2017 and again in 2022. The methodology employed for the study was agile ethnography. Data analysis affirmed that Reddit remains a nexus for individuals to communicate and experience authentic human connection through digital format. Further, data analysis revealed interesting points regarding the communication initiation-response phenomenon with comparison of similarity and difference behaviors between the 2017 and 2022 experiences, evolution of the community experience in the construction of the digital mandalas by r/place subgroups, and the emergence of collaborative and chaotic evil, good and neutral participants, and groups. The study also provides ideas for future socio-digital research.

Keywords: Reddit, Mandala, Sand Painting, Internet Culture, Ethnography, Collaboration, Chaos, Memes, Socio-digital, Communication Initiation-Response Phenomenon

Introduction

Online communities are rich in available information that provides important data regarding the need for human interaction within a digital platform. One such platform is Reddit, a social media app. Within this app, users join subgroups to form communities of information exchange, social interaction and development of identity and purpose. In step with this cultural phenomenon, this study examines the socio-digital behaviors of members within Reddit's r/place subgroups through online mandala, or "sand painting" participation.

In 2017, the discussion board Reddit, made a location available for participants to post single-colored pixels on a white canvas beginning April Fool's Day with simple instructions which promoted collaboration to the building of an online mandala. After 72 hours, the canvas was frozen and the result archived. Five years later, on April 1, 2022, the location, r/place, was made available again with the same simple instructions promoting collective participation. This time, four days later the canvas was again frozen but then allowed to white-out to nothingness. Over these active periods, communities arose and battled against other communities, alliances were made, and chaos attempted to reign throughout but was for the most part held in check. Both instances demonstrated the evolution of a thriving group dynamic. After the period of action in 2022, the authors noted that participants acted very much as religious and communal sand painters

in that they were limited in their ability to affect the “whole” by their participation in only the “part.” The authors also noted that a social environment was established which aligned itself with the ability to conduct an ethnographic study of the phenomenon. This paper examines the context and background, methodology, related analytical work, data and findings, summary of observations and ideas for future research of the group dynamics demonstrated in these Reddit digital mandala.

Using the model of Agile Ethnography proffered by Borkovich and Skovira (2018), this study focuses on the use of the social media platform, Reddit, as a means of electronic communication and response among subgroup members representing cultures, tribes and societies. Additionally, the authors focus on the experiences of the Reddit mandala of 2017 and 2022 by users. With a backdrop of the history and development of sand painting as a means of simple communications technology throughout the ages as described in previous researchers, the research questions explored include:

1. What similarities and differences can be observed from participants in the 2017 Reddit mandala experience and the 2022 Reddit mandala experience?
2. What types of behavioral phenomenon can be identified by user interface with Reddit r/place platform in the experience and final construction of the mandalas?

Context and Background

The history of sand painting is long and is manifested in and through different beings and cultures. Sand paintings are a system of collective tasks composed by autonomous and cooperative individuals that may or may not interact directly or indirectly to produce unexpected patterns resulting in some aesthetic or spiritual value (Urbano, 2011). Many species compose these types of paintings from insects to humans to communicate messages and meanings. For example, as Urbano (2011) points out, “Ant paintings, a term first used by Aupetit et al., are abstract images made on background neutral color, corresponding to visualizations of the paths made by a group of virtual ants that wander around on a toroidal virtual canvas, leaving colored traces. They used small virtual ant colonies (typically between 4 and 6) where the individuals do not communicate directly with each other—they use a stigmergic mechanism where color plays the main role” (p. 414). As Urbano goes on to explain “the color value functions as a virtual pheromone, which controls the movement of the ants and consequently their painting activity” helping the ants know how to behave and what movements to make (p. 415).

At the highest speciose level, throughout human history, sand painting art has had several evolutions, however, it remains “a special graphic symbol to meet with the need of communication and record” (Yang M, Jiang, Ding, Zhang, Yan & Yang G, 2019, p. 559). Sand paintings may be geometric, graphic or illustrative and can describe stories, events, scenes, emotions, beliefs, instructions, decisions and more. The research of Pegna, Patoftatto, Berge, Bangalan, Herring, LeSaux and Engler (1999), estimate that sand painting practices have existed for at least 1000 years among Native American tribes like the Navajo and among Tibetan monks as part of religious rituals. As they write, while the practice is called “sand painting” to the Navajo, the Tibetan practice is referred to as “mandala” (p. 696).

According to Yang et al., (2019), “sand painting is a form of combination of arts and modern aesthetic, which relies on profound cultural heritage and cultural connotation” (p. 559). This form of expression is communicative with deep meanings and purposes for members of a culture, tribe or society. For members of these cultures, tribes and societies sand paintings provide animated, tangible connections. As Hays-Gilpin (2019) explains these connections are nexuses for members to experience places, ancestors, deities, and community. As such, these connections are indigenous ontological systems in themselves. To one culture, these connections may convey identification of clan membership, associations, and rivalries. For

another community, the ontological system conveys connection to origin, chronologies, instructions, and resources. Using an example of Hopi rock images, Hays-Gilpin details that every adult Hopi male indicated their clan symbol while making pilgrimages for salt in the Grand Canyon as migration footprints for others. For members in another society, the connections relay pathways to “ancestral past and to the supernatural world of deities, beings, and other spiritual dimensions” (Chino, 2012, p. 5). For example, the sand mandala of Tibetan Buddhists is a meditative practice of impermanence. This form of sand painting is spiritual in nature. After completing an intricate pattern, the sand is brushed into running water. Finally, Yazzie (1997), regarding the Native American culture, interestingly refers to sand painting tradition and practice as a form of “Navajo technology” (p. 95).

In modern times, sand painting or mandala, in fact, is taking on a technological character arising from increasing interest and from decreasing availability of traditional resources. Because of its’ innovative style, interest in sand painting is regaining popularity in the new era. As well, automated creation of the mandala is also gaining popularity. To explain, as a reborn artform, sand animation continues to fulfill its dual purpose as expressive and communicative. As Wu, Chen and Lu (2018) describe sand painting “can tell stories by creating animated images with sand “which traditionally and manually “begins by applying sand to a lighted surface, after which images are rendered on the surface by drawing lines and figures with bare hands” from photographs or videos (p. 1). This traditional practice of sand painting poses, however, restrictions with equipment, supplies, space, and skill level for the artist. Hence, enter computer graphics, image processing, and a computer sand art technique called the digital mandala.

“Digital Mandala is an artwork that communicates between our physical world and virtual world” (Yoon, Song & Kim, 2013, p.496). As with the sand paintings of old, digital mandalas of modern time serve many of the same purposes including communication initiation and response, collaboration and rivalry, identification, and ancestry, and the spiritual and tangible revealing significant data about a culture’s, a tribe’s or a society’s behaviors and communication patterns. One such digital mandala is found in the Reddit subgroup, “place”.

The Reddit Mandala

Digital, representative mandalas have existed for years in various forms and for numerous purposes. Most notably, the social media website Reddit has utilized this art and technology communications form at least twice, in 2017 and 2022. Both instances have been initiated as Aprils Fools Day pranks in the Reddit subgroup r/place.

2017 r/place

The first instance of r/place was launched on April 1, 2017. The digital mandala canvas available was 1,000 x 1,000 pixels in size, one million pixels total. The initial canvas was without color; white to the observer. Anyone with a Reddit account could contribute to the experience by filling in one pixel tile with one color not sooner than five minutes after the last time they colored a pixel. The color of the pixel tile was chosen from a palette of 16 colors; the location on the canvas was designated by the participant. All pixels were available to be changed by anyone at any time; there was no permanence to the pixel once placed on the canvas.

Users were given the following guidelines:

- There is an empty canvas
- You must place a tile on it, but you must wait to place another
- Individually you can create something

- Together you can create something more (“r/place”, 2011, p. 1).

The “rules” for those provided guidelines were also noted:

1. Be Creative - Be creative and have fun.
2. Be Civil - It's fine to engage in heated discussions but please refrain from flinging personal insults, trolling other users, or harassing people.
3. Follow Sitewide Rules - Follow Reddit's content policy.
4. Participate in Good Faith - Comment, post, and add tiles to add to a community experience, not to subtract from it (“r/place Rules”, 2011, p. 1).

After 72 hours of availability, the canvas was frozen by the Reddit moderators and no more changes could be made; the final image was locked in place. (Childs, 2022, p. 1) At its start, the mandala experience displayed vulgar content. Initially, swear words, swastikas, and penises were unavoidably the first forms to appear on the canvas, but when different Reddit communities got together and collaborated on projects, the crude scrawls were quickly covered over with more elaborate and intelligent patterns, themes, and pictures. The creator, Josh Wardle, a senior product manager at Reddit, also the inventor of the word puzzle “Wordle” described the evolution of the process: “What was really amazing was seeing how quickly the community organized and started to self-police the canvas to keep it positive” (Cuthbertson, 2017, p. 1).

[In one example, a] multi-partisan group—leftists, Trump supporters, patriotic libertarians, and pre-political teen-agers—decided to draw an American flag in the center of the square. They congregated at r/AmericanFlagInPlace, where they hashed out the exact dimensions, the shapes of the stars and stripes, and strategies for repelling invaders.

The upper-left corner was a choppy, flickering purple, as the Blue Empire and the Red Empire battled for dominance. A graffiti artist, or artists, wrote, “9/11 was an inside job”; a few minutes later, the “was” turned into “wasn’t,” and the “an” became “anime.” Elsewhere, “Dick butt” became “Dick butter,” then “Dick buffet.” (Marantz, 2018, p. 1)

In the end, “1.2 million redditors used [the canvas] to build the largest collaborative art project in history, painting (and often re-painting) the million-pixel canvas with 16.5 million tiles in 16 colors” (“r/redditdata”, 2017, p. 1). Figure 1 illustrates the final mandala from 2017.



Figure 1: 2017 r/place Final Picture (one million (1000 x 1000) pixel squares in 16 colors) 2022 r/place

Five years later, Reddit made r/place's blank canvas available again on April Fools' Day, 2022. This time, the canvas would end up being open for editing for four days adding 16 more colors for a total of 32. Place used the same rules and guidelines taken from 2017 for all 2022 participants. The size of the canvas again began as 1000 x 1000 pixels in size however over the period of the event, the size had quadrupled to 2000 x 2000 pixels in size. However, in 2022, instead of freezing the pixels of the picture at the conclusion of the event, in the end Reddit only made the white pixel available for placement. This gave the distinct impression of the canvas being slowly wiped clean, just like a sand painting (Childs, 2022, p. 1). Over six million people placed nearly 72 million pixels at a pace near the end of over 2.5 million pixels per hour (Lin, 2022, p. 1).

[During its 2022 availability, r/place] saw fan-led campaigns from subreddits—like r/StarWars, which mapped out an entire movie poster, or r/EldenRing, which illustrated a character from the video game—as well as a turf war for canvas space. At one point, tribes banded together to battle a challenge from the “void,” an amorphous black blob (Lin, 2022, p. 1).

Everyone's work over the previous five days whited out. This final manifestation demonstrated the full path of the event, from blank nothingness, to form and function, and then back to nothingness. The last image of the completed mandala before it began to fade to white is shown in Figure 2.



Figure 2: 2022 r/place Final Picture before whiteout (four million (2000 x 2000) pixel squares)

Methodology

Agile Ethnography is a term which has been applied in several studies as a means to view a modern social environment (Borkovich, 2012; Skovira, 2014). Derived from traditional anthropological studies (Geertz, 1973), Ethnography has been described as “the task of discovering and describing a society’s culture” (McCurdy & Spradley, 1987, p. 3). The term Agile Ethnography has come to describe “an adaptable, flexible, short-term, fast-paced research process designed in order to explore and capture the multilayered and multileveled social-cultural environments of a fluid organizational situation” (Borkovich & Skovira, 2018, p. 46). While recent studies have focused on the work environment and agile ethnography’s ability to delve into the modern social constructs of an office setting, the authors believe agile ethnography can be used as a method to understand a wider range of modern social interactions, beyond the physical. The user-based interactive social service known as Reddit is just one example of a modern social interactive construct which invites an ethnographic method of study and evaluation.

Reddit is home to thousands of communities, endless conversation, and authentic human connection. Whether you're into breaking news, sports, TV fan theories, or a never-ending stream of the internet's cutest animals, there's a community on Reddit for you. (Reddit, n.d., p.1)

With an initial understanding of Reddit’s structure and purpose, agile ethnography provides an easily malleable study vehicle for Internet cultural interactive study. As “an interactive form of participant-observation implemented in [a] fast-paced, short-term, bounded environment” agile ethnography can provide “quality and timely qualitative results” (Borkovich & Skovira, 2018, pp. 48-49). Borkovich & Skovira (2018) derived how a modern form of ethnographic research, agile ethnography, could be adapted from a traditional anthropological or sociological construct.

Table 1: Comparison of Agile Ethnography Methodology to Traditional Ethnographic Process

Step	Traditional Ethnography	Agile Ethnography
1	Research Design	Explore All Qualitative Methods
2	Methodology	Mitigate Researcher Bias & Ethnocentrism
3	Participants	Describe the Cultural Group for Study
4	Data Collection & Analysis	Collect Participant-Observation Data; Identify Iterative Themes
5	Results; Limitations & Future Research	Draft the Narrative
6	Project Deliverable	Publish Study

Agile Ethnography was chosen as the primary study method of a Reddit social mandala environment to help to bound the study parameters. The six agile ethnography steps derived from the Borkovich & Skovira 2018 paper were adapted for this examination:

- Step 1: Explore All Qualitative Methods – the six Qualitative study methods chosen for compare and contrast explorative analysis were: In-depth Interview, Focus Groups, Action Research, Content Analysis, Case Study and Ethnographic Research (Valcheva, n.d., p. 1):

- In-depth Interview – this method was not chosen in that there was more than one participant, and all participants were ostensibly anonymous and go by one, if not perhaps several, usernames.
- Focus Groups – while the study method does include more than a single number of participants, it suffers from validity issues due to the anonymous online nature of participants. While attempting to interact with the individual Reddit subgroups which made up virtual communities of action might seem to be a means to describe their motivations, the participants tend to be extremely outsider-averse and thus unreliable for accurate observations.
- Action Research – while the researchers and recipients do have similar online characteristics, it’s difficult to verify and the participants’ veracity can be considered suspect for accurate observations.
- Content Analysis – is trying to find out how words and images are used and in what context. While image analysis is certainly a factor in the study, it is not the sole reason for the research and excludes the social interactions of the participants.
- Case Study – an in-depth research of a particular situation or event based on real-world experiences. Case study analysis is a factor in the analysis due to the gathering of large amounts of data being a part of the study, but this event is bounded in scope, type and time.
- Ethnographic Research – Tries to understand the cultures, challenges, motivations, and settings that occur. This was chosen as the primary analysis technique because it experiences the situations firsthand within a social, psychological setting of like-minded, focused individuals. The group dynamic is more important than the individuals’ participation.

Based upon the Step 1 method analysis, compare and contrast, Ethnographic Research was chosen, specifically Agile Ethnography, in that the participants were immersed and interactive within the Reddit group social dynamic as a primary focus area for research. The subsequent Agile Ethnographic steps taken from above were utilized as the research and creation of the narrative and further research aspects:

- Step 2: Mitigate Researcher Bias & Ethnocentrism – since the group is all inclusive of any number of anonymous participants, completely unknown to anyone participating or evaluating the group, researcher ethnocentrism is essentially nullified. Researcher bias as a factor was reduced to the extent it could be given the fact that the researchers were also part of the Reddit cultural group.

- Step 3: Describe the Cultural Group for Study – the cultural group in general was taken from anyone who wished to participate and log on with a username/identity; to that extent it was a wholly anonymous collective unless individuals wished to self-identify. This rarely happened as an anonymous identity was considered a standard. The only participants in a sense were the moderators who often times would self-identify and keep the event within the boundary of the described rules.
- Step 4: Collect Participant-Observation Data; Identify Iterative Themes – participant data was collected primarily after the event in the form of observation of screen events, screen grabs of noteworthy locations/events, Subreddits’ comments reviews, associated meme postings, and discussion strings of like-minded efforts and subgroups. These were all used to identify themes which led into step 5.
- Step 5: Draft the Narrative – the structure of the study was derived from associated event narratives and posts. The study tried to identify what was important in terms of a holistic examination of the event. While it would seem to be easy to identify major themes taken from posted visuals, the number of visuals and associated efforts over the length of time the events occurred focused the study into major overall events rather than identification of the individual elements. This resulted in the analysis defined in the Data and Findings section.
- Step 6: Publish the Study – Once written, the study was sent to IACIS for peer review, reediting/identification of co-authors, publishing and presentation of the study.

Related Analytical Work

Both before and after the posting of the 2017 and 2022 Reddit place mandala canvases, numerous academic investigations and studies related to Reddit community building and interactions were conducted. In a 2012 study of networks, Mason & Watts found that collective exploration improved success over independent exploration because good solutions could diffuse throughout a network. Buntain & Golbeck (2014) explored users’ posting behavior on Reddit. They found that users primarily participate in only one community. Early after the close of the first canvas, Rappaz, Catasta, West & Aberer (2018) attempted to establish a predictive model of participants’ behavior during the event. They considered the digital sandbox as a complex social system and built a model to help predict that behavior. Kumar, Hamilton, Leskovec & Jurafsky (2018) studied Reddit overall and found that less than 1% of communities start 74% of conflicts. While conflicts tended to be initiated by highly active members, they were also carried out by members who were much less active leading to conflicts formed in “echo chambers,” where users primarily talk amongst themselves. Vachher, Levonian, Cheng & Yarosh (2020) found that digital spatial conflicts on r/place involved multiple communities on both the “winning” and “losing” side; communities got involved in conflicts due to both geographic proximity on the canvas and due to existing political or cultural conflicts and that the total number of users per community overall is more important than the number of highly active users. Del Valle, Gruzd, Kumar & Gilbert (2020) used case study analysis examining two Reddit communities and found that informal learning processes occur in the communities and that moderators play a key role in fostering interactions. Litherland & Mørch (2021) used a mixed methods approach to focus on one 2017 canvas visual, the Mona Lisa painting with the Swiss flag. They found two real-world metaphors which helped explain related actions: from the incremental evolutionary process of a plant’s growth to the reactionary organization of a disturbed anthill. Overall, the studies helped to encapsulate the structural responses of Reddit members within the context of the r/place mandala experience.

Data and Findings

The data examined in this study revealed interesting behaviors among the different Reddit community participants for the mandalas. Data was able to be grouped by several themes including similarities and differences between the 2017 and 2022 versions; evolution; rivalry, chaos and cooperation.

Similarities Between 2017 and 2022 r/place Versions

Regarding research question 1, several similarities can be observed from participants in the 2017 Reddit mandala experience and the 2022 Reddit mandala experience. Both the 2017 and 2022 experiences used the exact same rules and guidelines which established a known constant throughout. Both activities created similar major categories of designs such as nationalistic, fine art, cultural artifacts, sports, and many others. While the basic categories remained the same between the two timeframes, by and large, the specifics of which category had more participation could not be compared because the canvas size was not equal and thus was eliminated as a factor for examination for this study.

The creation and use of “The Black Void,” was also used in both instances. The Black Void was a subgroup “tribe” of the Reddit Community. This tribe’s aim was to destroy mandala content by inserting and expanding black pixels over the pictures, graphics, and pixels of other subgroups. Once placed, there was also an effort to include stick figures which displayed various negative connotations to the larger group. The Void had both specific targets on the canvas and/or no targets – just taking over canvas space. They had varying degrees of success over time but overall could not hold nor increase their canvas space over the period the canvas was available. An example taken from one of the canvases is shown in Figure 3.

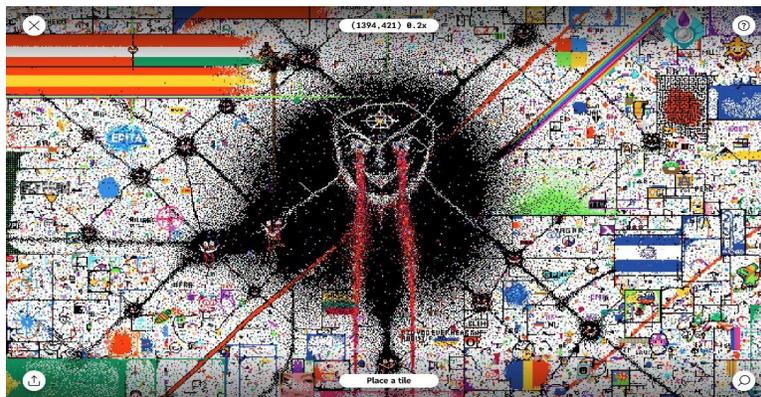


Figure 3: A snapshot of one instance of the Black Void’s work

The mutual struggle between countless groups for space and/or content, either for original or derived content was similar and simultaneous in both presentations and interesting to examine. One example of this struggle in the second iteration was the Canadian national group trying to establish a Canadian Flag’s Maple Leaf through collaborative pixel placement. They had obvious issues in trying to achieve cooperative success in replicating the leaf’s design. Another group, recognizing the issues the Canadians were having, hijacked the effort and mutated the flag’s symbol from a maple leaf into a banana, and for a time the pseudo-country of “Banada” was established as depicted in Figure 4.

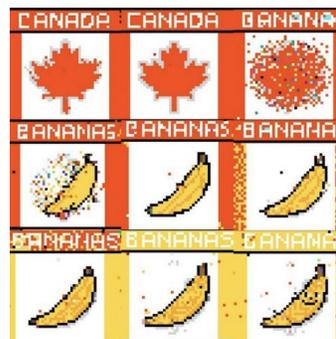


Figure 4: The creation of the 2022 “Banada” Flag

Both the 2017 and 2022 mandala experiences saw strong similar, positive collaborative policing impulses that adhered to a community standard and norm, outside the innocuously viewed Black Void interactions. Since both instances were essentially born of April Fool’s Day, pranks and off-color interactions were demonstrated at the start of the building of the mandala. This cooperative clean-up of content was shown to be a pervasive “unspoken” directive from the first instance. “In 2017, several small swastikas were quickly quashed by other communities. (One was promptly transformed into a Windows 95 logo.)” (Lorenz, 2022, p. 1). Perhaps while those collectively agreed hateful voices might be loud in other online forums and apps, they were ultimately tamped down and/or eliminated by other large fandoms and groups who dominated both years’ canvases. On the other hand, pornographic images were tacitly allowed and while they did arise and sneak through the self-filters from time to time they never maintained their place on the mandala canvas except when used as derogatory illustrations of other groups’ existence and icons.

Both years’ canvases also had the same specific aspects of creation as they related to location. Figure 5 shows the establishment and hold of The Blue Corner which got its name from its place in the bottom right corner of both canvases.

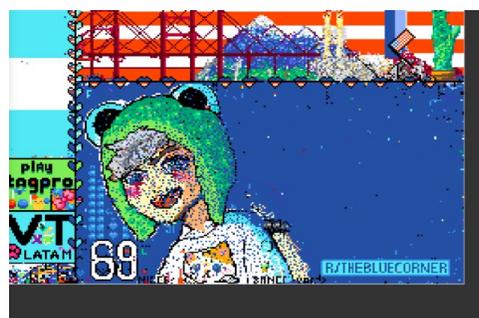


Figure 5: The Blue Corner

Differences Between 2017 and 2022 r/place Versions

Regarding research question 1, several differences were also observed in platform participant behaviors between the 2017 Reddit mandala experience and the 2022 Reddit mandala experience. The most obvious difference between the two experiences arose from programming changes in the platform of the mandala with increasing the available size of the space of the canvas. In 2017, the mandala canvas was established and maintained at 1000 x 1000 pixels in size and while the 2022 canvas also began as that size, it eventually was allowed to quadruple to 2000 x 2000 pixels in size; from one million to four million pixels available.

Another difference identified in this study regards Reddit's r/place user interface and familiarity with the platform and experiment design from 2017 to 2022. Reddit sub-genres from the first offering were quickly restarted with seemingly many of the same participants interacting. The novelty of the experience, while not eliminated, was perhaps diminished by those who had experience with the first go round. Reddit creators also expanded the available color palate from 16 to 32-pixel colors. While this did not have an overly apparent effect, it undoubtedly gave the participants a greater range of choices for their more colorful pictures.

One of the most obvious yet also subtle differences concerns updates to the 2022 experience was the extensive use of icons from the 2018-released "Among Us" video game. Its icons were quickly interspersed throughout backgrounds and as standalone icons on the canvas. The game, which was obviously not referenced in the 2017 canvas, uses anonymous, spacesuit shaped icons for its participants. Among Us is a multiplayer escape game developed by Innersloth studio. Using four to ten players per game, there are two sides: Crewmates or Impostors. The goal of the Crewmates is to identify the Impostors, eliminate them, and complete tasks around the map. However, the Impostors' goal is to sabotage the mission by killing the Crewmates covertly. Throughout the 2022 canvas, Among Us characters were sporadically used as large icons combating for space on the canvas. They were also more extensively used as background icons to intersperse throughout the canvas and the various artwork. Figure 6 demonstrates typical icons used in the game alongside a representation of their background use within the mandala. The background use was so prevalent that it became something like a game to try and find their position(s) within other icons use.

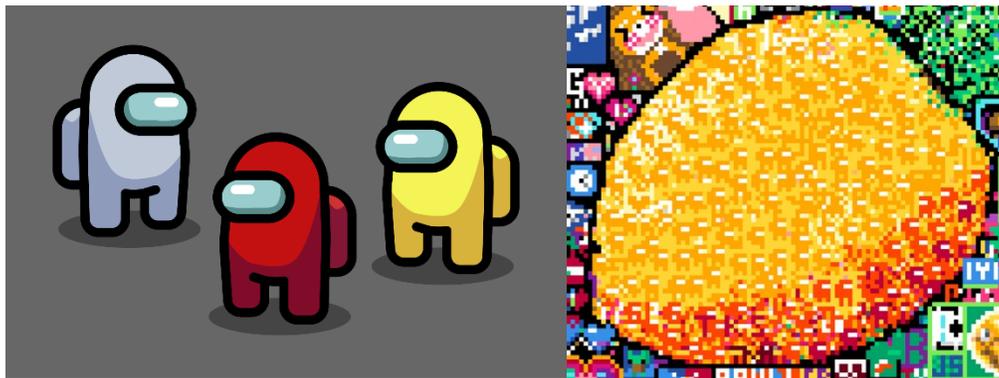


Figure 6: An example of 2018's Among Us game men with their use in the background of a drawing

Finally, there was a discussion during and especially after the conclusion of the 2022 experiment regarding whether to maintain a 5-year repeating between experiment cycles or whether to go to a shorter cycle. There were proponents of both: those who wanted to keep the tradition of a rare appearance of the experience and those who enjoyed it so much they wanted to have it come around yearly or at least more frequently than every five years. This remained unresolved.

Observed User Behaviors

Research question 2 focused on the types of behavioral phenomenon that could be identified by user interface with Reddit's r/place platform in the experience and final construction of the mandalas. The study revealed four prominent communication and response behaviors manifested by users in the mandala experiences: evolution, rivalry, chaos and cooperation.

Evolution

While there were similarities and differences between both versions, this study began with the 2017 experience but finally focused on the evolution of and into the 2022 experience. There were a few reasons why this was so. First, this was a symbiotic evolution of a cultural experience, and one could not be viewed without the other, explicitly because they were so interrelated in rules, users, form, and function. Second, this was the latest version of the experience and most applicable to study from a present day (2022) understanding of new and old cultural icons, causes, effects, etc. And finally, because this was the latest version of the experience, no previous research on the 2022 aspects had time to be formally studied academically. An April 2022 experience, studied from April through to the end of May 2022 (the deadline for submission of the draft paper to IACIS for consideration for presentation at the October conference) would have the latest understanding of both periods in focus.

Rivalry, Chaos, and Cooperation

While there are seemingly numerous aspects of these events which could be studied and analyzed, especially with the unlimited number of icons, pictures and representations, this paper focuses primarily on the chaotic actions of its many participants. Chaos, in and of itself, is not taken to be a purely derogatory in definition. There were essentially three aspects of chaotic action which were observed: Chaotic Good, Chaotic Neutral and Chaotic Evil. These three definitions are modeled on the law-abiding axis which is often used in participatory role-playing games such as Dungeons and Dragons. This lawful grid, seen in Figure 6, is used as an aid in explaining the actions of participants based upon degrees of good and evil, chaos and order and degrees of neutrality in between. (Anderson, 2016, p. 1)

Lawful Good	Neutral Good	Chaotic Good
Lawful Neutral	True Neutral	Chaotic Neutral
Lawful Evil	Neutral Evil	Chaotic Evil

Figure 7: The Law-abiding Axis

Chaotic Evil participants were those who were into destruction and disruption purely for its own sake. Groups which were given this label included those who identified as “The Black Void” and used black pixel placements to blot out aspects of the canvas for the primary sake of destruction. There were also aspects of creation in their destructive efforts in that included in the black spatial destruction, drawings of strawman entities with grinning faces and chaotic negatively inspired symbols were also used. This group seemingly used the blacking out of aspects of the canvas to try and take it over. They were met with mixed levels of success for different periods of time.

Chaotic Good participants were those who primarily tended to subvert others’ drawings into comical different entities. When the national group attempting to cooperate on drawing a Canadian flag maple leaf were observed having difficulties, the chaotic good group took it over and changed the maple leaf into a yellow banana and changed the title of the drawing from Canada to Banada. Clearly this was the work of

pranksters and meant for both their and other users' enjoyment; an insider joke for the participants. There were other actions which were more overt and more sexual in nature. The use of genitalia on drawings was also used, not so much for shock value but to subvert the actions into a running joke. Again, these actions did not have lasting effects and were usually removed by the collective.

Finally, Chaotic Neutral participants were those who neither destroyed the pictures nor turned them into comic material, per se. The group who used the Among Us characters would often post their icons in the backgrounds of established pictures and icons, sometimes the action being very obvious and sometimes the inclusion of one or two small characters through the manipulation of a few pixels. One of the activities of both these chaotic neutral posters and other observers was to try and pick out instances where the Among Us characters had been included. In pictures of large size and complexity, this could be easily accomplished with little overt notice. Thus, these chaotic actors were both participating in the vandalism of pictures but not destructive in their intent or result.

While the categories do hold firm in general, there is some bleed-in between several of them. For instance, when The Black Void largely cleared away content with their black pixels, other groups and individuals often came in behind and placed new figures and pictures in the void. Thus, while the overt efforts of The Black Void was meant to be destructive, they were also "clearing land" for others to use who might not have wanted to try and overtake other areas with established content or saw the void as new area for use. So, while Chaotic Evil intent might have been the initial intent, there was a Neutral Good use in the subsequent related actions.

Summary of Observations and Findings

This study of the r/place mandalas from 2017 and 2022 provided valuable insights into the communication initiation and response behaviors of subgroups i.e., cultures, tribes, and societies, using the Reddit social media app. The r/place mandala affirmed that Reddit remains a nexus for individuals to communicate and experience authentic human connection through digital format with similarities, differences and identifiable behaviors on the r/place platform. Throughout both experiences, the Reddit community was adamant that communication was authentically human-to-human and not via bots. The humanity of the experience was fiercely maintained in both the 2017 and 2022 instances as conveyed in community boards on Reddit. This important note, thus, became evident through the findings regarding similarities and differences of this study which became the springboard for the data revelations on evolution and rivalry, chaos and cooperation. Ultimately, as this study makes clear, constructive participation was valued much more than destructive participation.

Future Research and Conclusion

This study's purpose provided an ethnological analysis of the phenomenon of a digital community's interaction. A sociological examination may provide further insight to the motivations underlying identification, communication initiation and response, and human behavior in an online culture, tribe, or society. A second examination may provide further data regarding social media use and the importance of human connection through pattern, illustration, and graphic representation. The next iteration of the r/place mandala experience, presumably in 2027, would add another data point to the social-digital analysis highlighted in this study.

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