COMMUNITY MAPPING: FROM REPRESENTATION TO ACTION
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Abstract
Community mapping is an approach to spatial representation that promotes a sense of agency and active engagement by encouraging “bottom-up” participation by users and community groups. Reviewing the place-based work of an earlier generation of geographers, environmental writers, and artists, the paper provides a context for understanding contemporary mapping utilizing geo-technologies such as “locative media.” The author concludes that technologically empowered artists, partnered with specialists engaged in place-based research, can translate objective representations of place into socially engaged action.

Keywords: community mapping, sense of place, psychogeography, site-specific art, relational aesthetics, locative media, GPS, socially-engaged art.

Community Mapping
Community mapping, can be defined as a place-based approach that supports participatory action at the community level. It inverts the traditional "top-down" approach to mapping by:

1. incorporating local knowledge
2. integrating and contextualizing spatial information
3. allowing participants to dynamically interact with input and analyze alternatives.

As distinct from more traditional mapping processes that attempt to objectify and quantify a given locale or condition, community mapping can be seen as promoting a sense of agency and active engagement by encouraging “bottom-up” participation by users and community groups. Constructing an effective community map can lend visual clarity and authority to socially engaged art practices.

Deconstructing the Map
The recent history of cartography and geography has seen a full scale revolt against mapping methodologies that claim to be accurate representations of the world.

Maps are seen as active agents that help to preserve the status quo or catalyze change. While cartography as a discipline can represent place by literally reflecting “the lay of the land,” maps also play a crucial role in representing socially constructed views of place—what Harley characterized as “expressions of power and knowledge” [1]. A map has the capacity to represent diverse cultural, political, ideological, class, and gender views [2]. Theorists such as Denis Wood [3], John Pickles [4], and Rob Kitchin and Martin Dodge [5] have demonstrated the ideology inherent in maps (their second text) and how maps lie (or at least provide selective stories) due to the choices and decisions that have to be made during their creation, and how they are read by users. In increasingly pluralist societies, maps and geographic information help communities coalesce by delivering usable products and by building both spatial and human relations [6]. Maps can also add form to individual and collective reality and stimulate curiosity about the unknown [7]. Whatever else they are, maps are rarely to scale and they are never value neutral. They are constructed texts that can be read historically, socially, culturally, and psychologically.

John Brian Harley, for example, builds on the post-structuralist ideas of Michel Foucault and Jacques Derrida to argue that the process of mapping is not a neutral, objective pursuit but rather one laden with power. He contends that the process of mapping consists of creating, rather than simply revealing, knowledge. In the process of creation many subjective decisions are made about what to include, how the map will look, and what the map is seeking to communicate. As such, Harley notes, maps are imbued with the values and judgments of the individuals who construct them and they are reflections of the culture from which they emerge [8].

Historically, maps have been constructed by those in power. Communities—neighborhoods, local populations, cities and regions—are seldom engaged in representing their own circumstances. Communities that are empowered to make their own maps are communities that have a voice at the table and are engaged in a powerful form of self-representation.

To understand the relationship of traditional “maps” to those representations that truly engage “places” at the service of communities, it is helpful to make a fundamental distinction between “space”—as in a mathematically informed spatial description—versus the “lived experience” that characterizes “place.”

Place vs. Space: A Brief History
Blending philosophy and geography, Edward Casey, the eminent phenomenologist at State University of New York at Stony Brook, identified a tension—dating at least back to Plato and Aristotle—between Platonic notions of space that reduce certain primordial regions to simple geometric portraits, and Aristotelian notions of place that are rooted in pre-metric phenomena.

Where Plato, in his Timaeus, closely identified place with the abstract concept of space, Aristotle, in his Physics, shifted attention away from place as the pure body felt power of place [9].

Today, a useful description that moves beyond the contested distinctions between space and place can be summed up in the simple equation: “space + meaning = place” [10]. Space is the abstract perception of the world around us and place is space as lived and experienced. Where the concept of space encourages a purely mathematical description (Cartesian or otherwise), place requires a more phenomenological, body-centered orientation. Casey (and Aristotle) would argue that space refers to objective geometrical extension and location, and that place describes our subjective experience of being in the world and investing a physical location or setting with meaning, memories, and feeling [11]. This essentially Aristotelian idea echoes the conclusions of many field-based studies and locational media projects that have taken a second (and third) look at specific landscapes. In the book Third Views, Second Sights, which details the ongoing Rephotographic Survey project of the American West by teams of photographers, project leader Mark Klett writes that “the intimate knowledge of a region by its residents has changed the once common view that the West is empty geography” [12]. The purely instrumental goals of spatial description—the objective basis of much of western science—give way to a deeper place-based understanding informed by generations of human experience.

Yi-Fu Tuan, another pivotal geographer/philosopher, focuses on human experiences and connections to places. His work provides a solid grounding for understanding the concept of place as a humanistic construct. Tuan’s experiential perspective describes place as created by the process of human experience in a physical space. This process is explained through four layers of human experience: physical, social, personal, and cultural [13].
More recent articulations of place have laid emphasis on situated communities and their relationship to the natural environment. Here our “subjective experience of being in the world” is expanded to include our embeddedness in communities.

Sense of place includes how well the community is situated within the natural environment in which it is located; how well it relates to and exhibits its historical and cultural development and uniqueness; and how the people within the community live that reflect a sense of community cohesion and purpose [14].

While Lew’s definition of sense of place may impose impossible demands on communities—which are often conflicted, and manifest contradictory missions—it does offer a kind of rubric for balancing a given community’s drive towards growth and change with sustainable models more in harmony with its cultural legacy and the natural environment.

This layered web of interactions is echoed by a number of well-known environmental writers such as Wendell Berry, Wallace Stegner, Barry Lopez, Annie Dillard, and Aldo Leopold.

Less acknowledged is the engagement by visual and performance artists, poets, and technologists in exploring the intersection of the body, geography, and community.

The Mapping Impulse in Art

Starting in the 50s, and reaching full flower in the 60s and 70s, artists engaged in performative practices that explored territories outside the confines of the traditional (commercial) gallery. Their own bodies provided the referent to engage real spaces—from untouched wilderness to the urban jungle.

In the 50s, the Situationist International (SI), a political and artistic movement organized by Guy Debord and his colleagues and represented by a journal of the same name, invented a series of techniques for engaging in class struggle by reclaiming individual autonomy from “the spectacle” (contemporary consumer culture and commodity fetish) [Fig. 1].

Debord and his cohorts gave the methodology of psychogeography a quasi-scientific status in order to oppose, in part, the rationalized, Corbusian-style town planning of post-war Europe [15].

Psychogeography is an approach to geography that emphasizes playfulness and "drifting" around urban environments (the dérive). It was defined in 1955-56 by Guy Debord as “the study of the precise laws and specific effects of the geographical environment, consciously organized or not, on the emotions and behavior of individuals” [16].

The Situationist’s work in psychogeography laid the conceptual foundation for a generation of experimental artists who embraced “walking” as a central part of their practice—artists such as Peter d’Agostino, Richard Long, and Vito Acconci.

In his early, performance-based work from 1973-74, Peter d’Agostino experimented with perceptions of landscape, time, and point of view. The Walk Series documents three different “walks” (on a roof, a fence and a beach) that the artist took in the San Francisco area, while recording with a hand-held camera. These excursions—recorded in real-time and unedited—map the parameters of the artist’s environment, as d’Agostino uses video to redefine the landscape in his own image [17].

Where d’Agostino’s work is mediated by the camera, and is generally experienced as a video recording, the famous walks of Richard Long are minimalist traces that require a leap of the imagination for the viewer to participate [18]. His insistent lines and circles, hand drawn on maps and often reconstructed in galleries, anticipate, record, and serve as documentation of his walking meditations and gestures.

The private nature of these works point to an intensely personal and meditative experience. Broader social and pressing environmental concerns soon became the focus of many artists, however.

While echoing the social movements of the 60s, the 80s and 90s saw a turn toward real social and political in the work of many artists. Projects such as 7000 Oaks by Joseph Beuys (1982) and No Blood, No Foul by Suzanne Lacy (1995-96) set the stage for what theorist Nicolas Bourriaud called, in 1996, relational aesthetics—“a set of artistic practices which take as their theoretical and practical point of departure the whole of human relations and their social context, rather than an independent and private space” [19].

In 1982 Beuys was invited to create a work for Documenta 7. He delivered a large pile of basalt stones and announced that the stones would mark the planting of 7000 oak trees around the city of Kassel, Germany. The goal of the project—a work, in Beuys’s words of “social sculpture”—was nothing less than to affect long term environmental and social change.

Many artists in the past decade have found ways to combine intensely personal, embodied experiences with work that is “activist” in nature and seeks, if not “social change,” an awareness of intractable social, political, and environmental issues.

In June 2005 Francis Alÿs walked from one end of Jerusalem to the other, a distance of 15 miles, carrying a can filled with green paint. The bottom of the can was perforated with a small hole, allowing the paint to dribble as a continuous trace on the ground as he walked.

His walk followed the line demarcating the armistice after the 1948 Arab-Israeli War. The original “Green Line,” negotiated by Moshe Dayan, commander of the Israeli forces in the Jerusalem region, and Abdullah al-Tal, representing the Arab Legion, has since been considerably altered on the ground, the shifting border reflecting the irreconcilable difference of two peoples [20].

While Alÿs resists taking an overt stand, the work is hardly neutral. Combining in a sense the respective legacies of early performance art with the social conscience of a Beuys or Lacy, he creates a metaphor about history with his body, what Holland Cotter called “a separatist symbol, both triumphant and oppressive” [21].

This engagement of urban space, while evoking the early experiments of the Situationists, suggests a more activist position, one that acknowledges and encourages participation by real people in real places. It also finds a kindred spirit in the work of Simon Pope.

One of Pope’s recent projects, Memory Marathon, reflects on the enduring importance of personal recollection during times of major cultural and political change. On November 7, 2009, Pope walked 26 miles in twelve hours through the five East London boroughs hosting the 2012 Olympic and Paralympic Games. Starting out at dawn from Thamesmead in south-east London, and arriving twelve hours later at the entrance to Olympic Park in Stratford, Pope accompanied over a hundred local residents through Greenwich, Newham, Tower Hamlets, Hackney and Waltham Forest. In an unbroken relay, in which each resident walked a 400-metre section of the 26-mile route alongside Pope, they were asked to speak about a personally significant moment from Olympic histo-
Locative Arts and Media

Over the past decade, developments in geo-technologies along with the availability of low-cost, light weight hand-held devices, have laid the foundation for an entirely new genre of interactive media called locative media [23] or, alternatively, locative arts [24]. Whatever the appellation, the idea has taken root in participatory culture and socially engaged art, emphasizing the linkage between social networks and the geographical context of media. The technology enables experiential mapping and geo-spatial annotation to produce online applications that support geographically “located” communities.

Combining the idea of the personal walk with these new technologies, Christian Nold’s Emotion Map presents the individual’s subjective state, measured using Galvanic Skin Response as an index of arousal, within a GPS map. Each map is a personal record of an emotional as well as a physical journey [25].

An earlier instance of locative media in 2002 by Dutch artist Esther Polack and the Waag Society created a precedent for this kind of GPS enabled derive to create both individual records of people’s peripatetic walks of Amsterdam, and aggregated maps that effectively illustrated the “city drawing itself” [26].

Teri Rueb has constructed a body of work utilizing GPS to activate “sound walks” that draw visitors into intimate relationships with various landscapes.

In a recent work at the Institute for American Indian Art in Santa Fe, Rueb and her team created a GPS-based sound walk and sculpture installation that explored the concept of wilderness and its shifting meanings across cultural contexts. Entitled No Places With Names, the sound walk premiered at ISEA 2012 [27].

The work of sound artist Yolande Harris offers a challenge to the assumption that there is a one to one relationship between “location” and “position” via GPS. In her work Sun Run Sun, she investigates navigation through the use of sound by charting a path between embodied experience and the drifting calculations of GPS satellites. A continuously changing musical composition is generated from signals of navigation satellites in orbit, together with the participant’s coordinates on earth [28].

Adding additional layers of GPS enabled sensory input is the work of Meredith Drum. Her work Oyster City is an augmented reality, mobile media walking tour and game which guides participants along branching story paths through lower Manhattan and around Governor’s Island. Produced collaboratively by Drum, Rachel Stevens and Phoenix Towes, the piece explores urban history with a focus on oysters.

The work allows participants to explore GPS anchored augmented reality assets as a way of experiencing the urban water’s edge and enables not only GPS placement of text, images and sounds, but also touch, orientation, and movement events, allowing the participant to act as a performer as well as a viewer [29].

For all the promise of locative media, some critics have already identified the dark underbelly of the technology. Brian House and his colleagues at the Research and Development Lab at New York Times Company have created OpenPaths, a platform and a model that demonstrates the collective value of personal data sovereignty. House writes:

The collection of personal geographic data from mobile devices is a ubiquitous practice of service providers and application developers. These data are being stored, analyzed, and monetized primarily by corporate interests; there is limited agency for individuals over their own data [30].

For House, a critical question remains:

How can we seat the individual in a mode of control over personal geographic narratives in a society in which locative media has become banal [31]?

Community Mapping and Socially Engaged Art

Locative media is being used to develop community maps that aid environmental protection and restoration, track human health trends, and serve poverty alleviation projects seeking to comply with international law for human rights. Locative media, in concert with community maps, can serve neighborhood groups in formulating action agendas and making their case to elected officials and policymakers. The strategy can reveal the stories of place that remain invisible to the casual observer. It can provide a matrix for organizing, tracking and growing socially engaged art practices.

Sauti ya wakulima, “The voice of the farmers,” is a collaborative knowledge base created by farmers from the Chambezi region of the Bagamoyo District in Tanzania [Fig.2] with assistance of a group of artists and technologists. The farmers use a laptop computer and a 3G Internet connection to view the images and hear the voice recordings that they posted during the week. They also pass the two available smartphones on to other participants, turning the phones into shared tools for communication. The smartphones are equipped with GPS modules and an application that makes it easy to send pictures and sounds to the Internet. The farmers at Chambezi use them to document their daily practices, make reports about their observations regarding changes in climate and related issues, and also to interview other farmers, thus expanding their network of social relationships [32].

Jeanette Hart-Mann and Chrissie Orr have created another project that incorporates community mapping practices. In their words, Seed Broadcast is a collaborative project exploring grassroots seed action through collective inquiries and hands-on creative practices. Throughout the year, the team gathers to discuss critical issues surrounding seed and food sovereignty, visit local farms and gardens to experience what is happening in the field, and engage in creative projects, to dig deeper into the real how-to’s of local agri-culture [33].

A website and online map geo-locates their growing web of partners and seed banks across North America.

In a recent project of my own, I have organized a collaborative undertaking focused on the future of the Colorado River.

The Colorado River Re-Storied is a collection of “stories of place” shared by individuals with personal experience, distant love, or professional involvement with the Colorado River and the entire Colorado River watershed. Our goal is to “re-story” the landscape of the Southwest by helping to describe, re-store, and re-discover the hidden or lost cultural practices and pragmatic wisdom of the Colorado River — and provide alternatives scenarios for the future.

My collaborators, Meredith Drum, Helen Rowe, Eric Margolis, Kaard Bombe, Shaun Ylatupa-McWhorter, and I believe that a collection of short, first-person accounts will not only give voice
and expression to the uniqueness and hidden potentials of the River, it will catalyze a conversation focused on sustainable solutions for preserving and protecting this most precious life-line for future generations. We consider this work a “community map” in that it provides a collective portrait of place — in this case, the 1450 mile reach of the Colorado River [34].

Conclusion
Putting mapping tools in the hands of artists helps to capture the complexity of a given place—including nuanced descriptions of physical settings, evidence of lived experience, and creative interactions with communities. Technologically empowered artists, partnered with specialists engaged in place-based research, can translate objective representations of place into socially engaged action.

References and Notes
11. Casey [9].
13. Yi-Fu Tuan, Space And Place: The Perspective Of Experience (Minneapolis: University of Minnesota, 1977).
31. House [29].
Fig. 1. Guy DeBord, *Guide Psychogeographique de Paris* (Denmark: Permild & Rosengreen, 1955?), cover.
Fig. 2. Eugenio Tisselli, Juanita Schläpfer, Angelika Hilbeck, *The Voice of the Farmers* (Tanzania, Africa: 2012) <sautiyawaklima.net>