Social Cartography: The Art of Using Maps to Build Community Power

By Eli Moore and Catalina Garzón

It was November 2008 and eight leaders from environmental justice community organizations were scrutinizing a map of southeast San Francisco showing areas experiencing problems with diesel trucks. Hand drawn blue and red lines indicated the locations of freeways and truck routes in the neighborhood. “Why do you think these problems exist here?” asked the facilitator. The response was immediate: “Because the people who live here are poor! And the people in charge don’t listen to us.”

In recent years, mapping has increasingly become a key strategy for analyzing and communicating issues in public health, urban planning, environmental justice, and human rights. In mapping their own communities and reflecting on the maps they create, people can develop and advocate for solutions. Developments in GIS (Geographic Information Systems) and internet-based mapping, and greater accessibility of digital data sets have made mapping feasible for people with moderate resources and technical training. Also, a growing appreciation for geographic thinking and the value of looking at social and environmental problems through a geographic lens have helped, even as concepts of space and place become mainstream.

Not all mapping processes, however, are participatory and it is still rare for non-professionals affected by the issues being mapped to be involved in the decisions guiding map creation, analysis, and distribution. In the U.S., there is such an abundance of easily accessible data that asking residents to generate their own seems redundant. Yet, we believe that this type of mapping holds great potential for shifting the relationships of power that are the root cause of social and environmental injustices.

A mapping process—which includes selecting labels and symbols, choosing the scale, and layering—guided by the people most affected by the issues being mapped has the potential to develop critical consciousness and generate collective action because:

- Participants develop their own language to describe their reality, producing terms and definitions that reflect their values.
- Shared personal experiences enable groups to analyze patterns and identify collective experiences.
- The role of institutions and the extent of their power in shaping collective experiences becomes more obvious.

A Tradition Older than Writing

People have been creating maps to understand their surroundings since before the invention of writing. As Margaret Wickens Pearce and Renee Pualani Louis write in Mapping Indigenous Depth of Place, “Indigenous cartographies are as diverse as indigenous cultures... Indigenous mapping may be gestural, chanted, or inscribed in stone, wood, wall, tattoo, leaf, or paper. Indigenous maps may be used to assess taxes, guide a pilgrim, connect the realms of the sacred and profane, or navigate beyond the horizon. Clearly, indigenous cartographies are process oriented as opposed to product dependent.”

However, the maps that most people get acquainted with in elementary school reflect the legacy of colonization, resource extraction, and state control. Maps were instrumental in the process of making desired resources visible and people invisible for imperial bureaucracies. But today, indigenous people, such as the Nunavut of Canada, are at the forefront of using mapping to reclaim their land and resources.

With the widespread use of internet-based maps and GPS units in cars and cell phones, mapping is more a part of people’s everyday experience now than ever before. Mapping by social and environmental justice organizations has also mushroomed. Some mapping involves elaborate GIS analyses, such as the opportunity mapping developed by the Kirwan Institute. And interactive mapping websites allow users to choose from numerous datasets and create custom maps. Other online maps use a Google platform, such as
Building Maps for EJ

Like most EJ issues, freight movement involves complex relationships between land use, transportation, air quality, community health, race, and wealth. Maps often help make these relationships clear. As one workshop participant pointed out, “You can talk about all the different toxins in the air, but if you’re not seeing a map of all these facilities as they really exist, you’re missing out. Mapping is a great tool for myself as an organizer, and for my active members to inform their neighbors and keep that conversation going.”

To relate to a map, we must be able to see something of ourselves in the map. If we can recognize a street corner, a park, a hospital, we can begin to place our experiences on the map. Aerial photos help because they show the unique colors and distinct shapes of buildings, streets, and other features. Our base map in workshops is a poster-sized aerial photo of the neighborhood with the streets labeled. It is ideal because at larger scales, the details get lost.

For a map to respect a group’s knowledge and experience, it must use the group’s language. What this means is that the symbols and place names should come from the group’s own discourse. Critical geographers like Jay Johnson have pointed out that Cartesian maps limit our representation of space because they demand fixed boundaries, whereas many cultures value fluid boundaries.

To understand the root causes of a collective problem, the maps must make visible the factors shaping the problem. Being able to view different data sets layered on top of each other—for example, demographics, land use, and asthma rates—helps the exploration of their relationship to each other. In one workshop focused on freight transport, the groups mapped streets with heavy truck traffic and the businesses that attracted them on a transparency placed over an aerial photo of the neighborhood. When the same transparency was overlaid on a map of the same area with land use designations, it became apparent that the problems were wherever industrially-zoned parcels were mixed in with residential parcels. The layering of community knowledge over institutional and legal boundaries can help the community move beyond the immediate problem to an exploration of its political roots.

Mapping as Community Builder

Generating a “bigger picture” understanding of how an issue impacts an entire community can help strengthen relationships between residents affected by the issue. A key challenge in mobilizing around an issue is convincing people of the value of joining others to work together.

Map-making can be a useful tool in scaling up from the individual lived experience to building a shared analysis about collective challenges. Making maps together means piecing together collective experiences, discovering patterns, and arriving at a collective understanding of the root causes of these shared experiences.

Endnotes
4. www.healthycityca.org