Mapping the Economic Impact of the Solidarity Economy in the Eastern United States

---

Craig Borowiak
Associate Professor of Political Science
Haverford College
Philadelphia, PA
USA

cborowia@haverford.edu

Prepared for the 5th RIPESS International Meeting of Social Solidarity Economy (SSE)
Manila, Philippines, October 2013

Contents

List of Acronyms

B-CORP	B-Corporation
CDC	Community Development Corporation
CDCU	Community Development Credit Union
GIS	Geographic Information Systems
RIPESS	*Réseau Intercontinental de Promotion de l'Économie Sociale Solidaire* (Intercontinental Network for the Promotion of Social Solidarity Economy)
SE	Solidarity Economy
SSE	Social Solidarity Economy

List of Figures

Introduction[1]

In recent years, practitioners and researchers of the social solidarity economy (hereafter SSE) have taken great interest in ideas of "mapping." This interest has been evident at multiple local levels. Mapping, for example, is explicitly promoted by the Intercontinental Network for the Promotion of Social Solidarity Economy (RIPESS) through its ESSGlobal initiative. Mapping is also a recurring theme at international SSE conferences and forums.[2] Mapping has also been a major theme at national level and local levels, where SSE practitioners and researchers turn to mapping techniques as a way to boost awareness and foster local support for the SSE.

Maps, however, can serve different functions, and mapping can be done in a variety of ways. Thus far, most SSE mapping initiatives have focused on maps as tools for movement building. They focus on maps as ways to build SSE networks, organize SSE practitioners, heighten the visibility and credibility of SSE practices, and foster markets for SSE products and services. In this paper, I introduce a different, more sociological mode of SSE mapping. Drawing upon preliminary research conducted in Philadelphia, Pennsylvania, I demonstrate how maps can be used to analyze demographic patterns that underlie the SSE and its various sectors. For this type of mapping, the primary aim is not to make it easier to find and learn about individual SSE entities or practices. Instead, the aim is to identify spatial patterns in the way groups of SSE organizations cluster in their natural and human environments. Using sophisticated mapping methods and software, we can plot the geographic coordinates of SSE organizations against the spatial demographic patterns of their neighborhood, town, city, and/or region. Doing so, we can then identify spatial relations between SSE practices and socio-economic, racial and ethnic variables. This is especially useful for assessing claims that the SSE can counteract economic hardship and build bridges of solidarity across social and economic divides. Analyzing where SSE entities fall on the map can help us evaluate the truth of such claims. Mapping the demographic patterns of the SSE can also help us identify which communities the SSE does and does not reach, and which sectors of the SSE do a better job of reaching the most needful neighborhoods.

I have organized this essay in the following way. I begin by describing some of the different ways that mapping has been approached within the SSE movement. I then introduce the Philadelphia research project along with the larger government-sponsored research project of which it is a part. I follow this with a more detailed discussion of our preliminary findings in Philadelphia, including a presentation of several demographic maps of Philadelphia. Finally, I draw some brief conclusions about the potentials and limits of this sort of research.

[1] This essay has benefited tremendously from the hard work of several very talented student research assistants. Samantha Shain helped design most of the core maps while providing crucial database support. Madeline Smith-Gibbs has generated and maintained much of the database, which has been based upon the original work of Cameron Scherer, who initiated the first inventory of SE in Philadelphia in 2010.

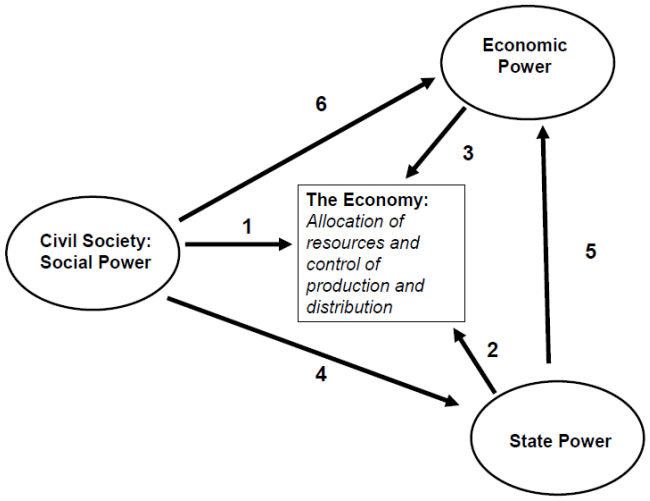
[2] Among other examples, this includes the International Forum on the Social and Solidarity Economy (FIESS) held in Montreal in 2011, and the 2013 conference on "the Potential and Limits of Social and Solidarity Economy" hosted by the United Nations Research Institute for Social Development (UNRISD).

PART ONE: Varieties of SSE Mapping

As I suggested above, there are different ways to map the SSE. Looking over existing mapping initiatives, three distinct modes of mapping are particularly prominent.

First, there are efforts at *conceptual mapping*. By conceptual mapping I refer to efforts to diagram the relation among different SSE categories and between the SSE and other economic frameworks. Here, it is not geographic formations that are being mapped but rather concepts. I call it mapping here, but it might just as easily be called modeling. This type of mapping/modeling has been particularly important for scholars grappling with various conceptual debates within the SSE movement (e.g., disputes over the relation between the social economy, the solidarity economy, and the third sector). Conceptual mapping has also been important for communicating SSE concepts to the wider public and for clarifying the boundaries separating the SSE from other modes and sectors of the economy. In Figure 1, I illustrate with an example from Erik Olin Wright's *Envisioning Real Utopias*.

Figure 1: Pathways to Social Empowerment



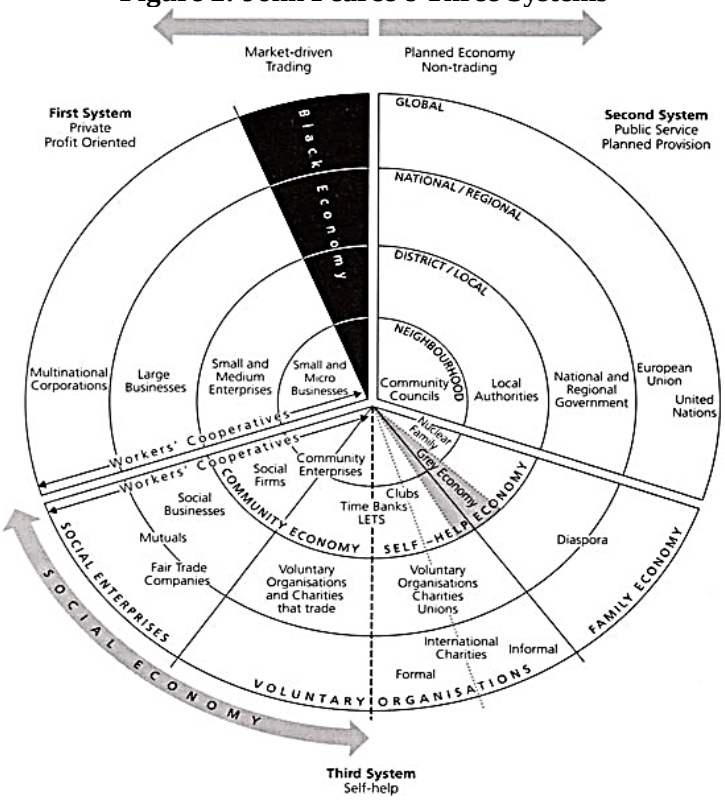
Source: E. O. Wright, *Envisioning Real Utopias* (New York: Verso, 2010), 130.

In this diagram, Wright models different sources of power over the economy and different pathways of influence. In his book, he goes on to categorize different social configurations according to which type of power exerts the greatest influence over the economy and how. As he conceives it, social economy is characterized by the direct influence of social power over the economy. A social democratic pathway, by contrast, would involve social power being mediated by state power. Social capitalism would involve social power being mediated by economic power. He works through several additional configurations in order to clarify the different pathways of what he calls social empowerment.

Wright's approach is only one example of how the SSE might be mapped conceptually. John Pearce, for instance, maps the SSE with an image of concentric circles divided into slices, each

circle representing a different geographic extent and each slice representing a different sector or system of the economy. See Figure 2.

Figure 2: John Pearce's Three Systems



Source: Pearce, J. 2003. *Social Enterprise in Any Town*. London: Calouste Gulbenkian Foundation.

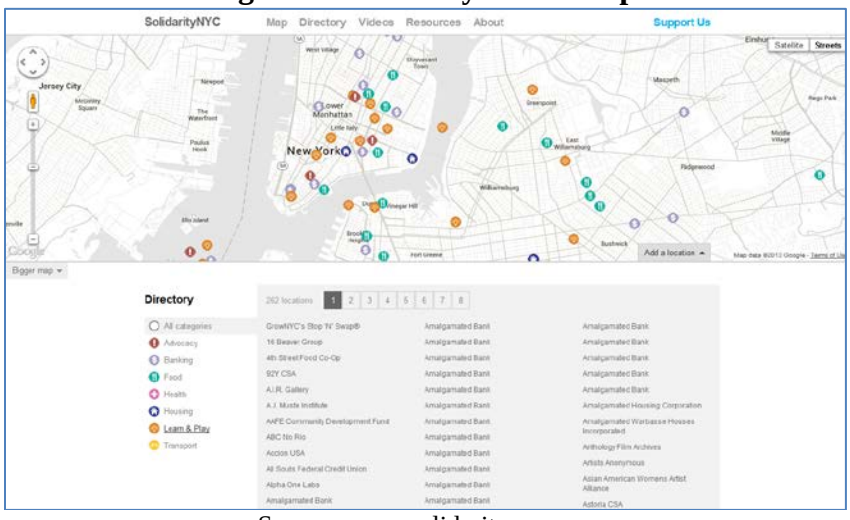
In this familiar diagram, the social economy is in the third system of the economy in the bottom left corner of the image, separate from both the public service system and the private market system. There are many different ways to map these economies. Other notable and influential examples have been generated by J.K. Gibson-Graham (2005); Evers and Laville (2004), Pestoff (1998), and Miller (2010).

A second, more conventional, type of SSE mapping involves mapping the physical locations of individual SSE organizations so as to make it easier for interested parties to find them. This has most often been done through interactive web platforms that enable users to search for different categories of SSE within a set geography, be it a city, a selected distance from a city center , an entire country, or, most ambitiously, multiple countries at once. I refer to this as "locational mapping" because it primarily serves a locator function: it enables consumers, sellers, researchers, policymakers and others (including other SSE organizations) to find, learn about, and potentially contact particular SSE organizations. This sort of mapping also offers a way to build the SSE movement by heightening the visibility of the SSE in general; users of the platform can see the range of products and services provided and the extent of the SSE's presence across any give geography. Figure 3 and Figure 4 provide visual examples from Brazil and New York, respectively.

Figure 3: The Brazilian Solidarity Economy Map

Source: http://www.fbes.org.br/farejador

Figure 4: SolidarityNYC's map



Source: www.solidaritynyc.org

Other prominent examples can be found in Italy, France, Luxemburg, Quebec, and Spain, among other places. This sort of mapping is also at the core of RIPESS's ESSGlobal initiative to make

existing mapping platforms interoperationable so that SSE searches can be made across borders. The different mapping platforms differ in both structure and content. They use different modes of data collection and data management, different ways of defining the SSE, and different technologies for representing and processing data. They nevertheless share the objective of making it easier to navigate to particular SSE entities and to learn about their various economic offerings.

A third mode of SSE mapping adopts a more commercial focus. It involves the mapping of SSE supply chains. The point of this mapping is not to represent the relation between a particular SSE organization and a physical location (e.g., a street address). Rather, it is to represent the relation between buyers and suppliers within the SSE and between SSE entities and conventional firms as a way to comprehend and encourage linkages among SSE organizations across the economic cycle (Safri forthcoming). This type of SSE mapping is, as of now, less developed than the other types of mapping, but interest in it is growing. It is, for instance, evident in the efforts of the Brazilian solidarity economy movement to integrate more market functions into their locational maps. It is also evident in the Fair Trade movement as well as in the push for open pricing policies that reveal the locations and sources of inputs. In the U.S., it is evident in efforts to use large anchor institutions such as universities and hospitals as "anchors" for cooperative economic development. This approach is embodied most famously in the Evergreen Cooperatives of Cleveland, Ohio, but it extends elsewhere (Howard et al. 2010). This approach to cooperative development requires that cooperators identify the proposed anchor institutions' major inputs and outputs and how they are sourced. Once the supply chains have been mapped, it becomes possible to identify links in that chain that might be redirected towards local economic development.

All three of these different approaches to mapping SSE make important contributions. In the remainder of this paper, however, I wish to introduce yet a different mode of mapping the SSE. Instead of mapping a particular SSE organization's locational coordinates, such as we might do with a street map, we wish to plot sectors of the SSE against the spatial demographic patterns of their neighborhood, town, city, and/or region. In the following section I describe some preliminary efforts to do this sort of mapping in the Eastern United States as part of a government supported research project.

PART TWO: Solidarity Economy Research in the Eastern United States

In September 2013, the U.S. government's National Science Foundation (NSF) funded five researchers two economists, two geographers, and one political scientist) to study the solidarity economy in the eastern United States.[3] The grant covers two years of research at four research sites representing different population scales: New York City (pop. 8.2 million); Philadelphia (pop. 1.5 million); Worcester, Massachusetts (pop. 180,000), and Western Massachusetts, which is home to large number of rural communities.

[3] The researchers are: Maliha Safri (Drew University), Emily Kawano (Center for Popular Economics), Marianna Pavlovskaya (Hunter College, CUNY), Stephen Healy (University of Worcester), and myself (Haverford College).

The underlying premise of this research project is that the solidarity economy (hereafter SE[4]) has significant impacts on local and regional economies but that these impacts are largely unrecognized by policymakers and community members alike, who are unfamiliar with the SE concept and unaccustomed to seeing solidarity-based provisioning as economic activity at all. SE initiatives are altering local economic landscapes in the United States (as elsewhere), yet they typically fall outside of mainstream studies of the economy that focus instead on state budgets, for-profit capitalist enterprises, and the market economy. In the U.S. specifically, relatively little empirical research has been done to evaluate the contribution of the SE to local economies. To the extent that SE entities *are* studied, they tend to be treated in isolation from one another. Thus worker cooperatives are studied independently from consumer cooperatives, which are studied independently from credit unions, community gardens and so forth. This piecemeal approach contributes further to the perception that the SE occupies at best small niches in the economy. Our project asks what new perspectives and geographies emerge when diverse SE initiatives are studied together rather than in isolation from one another. Further, we seek to examine which communities are and are not being reached by the SE in general and by different sectors within the broader SE. Specifically, this research has five primary components:

1. First, we aim to create a single national-level spatial database of the SE that can be analyzed quantitatively in terms of overall size, sectoral composition and geographic patterns. This national-level database will be used to contextualize our in-depth cases and to identify macro contours of the SE across the U.S.

2. Second, and most relevant for this essay, we aim to generate detailed inventories and spatial databases of SE entities in our five research sites. We will use U.S. Census data and Geographic Information Systems (GIS) methods to map these data in ways that allow us to identify regional and local SE clusters and to analyze the distribution of the SE with respect to ethnic, racial and income patterns.

3. Third, we will conduct in-depth qualitative interviews with SE practitioners in different SE sectors in our research sites

4. Fourth, we will administer an economic impact survey to SE enterprises that will enable us to develop economic modeling tools to assess the overall economic impact of the SE entities in these regions, taking into account both direct and indirect impacts, as well as multiplier effects.

5. Finally, we aim to generate an open, internet-based interactive mapping platform for SE along the lines of those developed in Brazil, Spain, and elsewhere, as described earlier in this essay.

This research is currently ongoing. Prior to the grant, however, a pilot study was conducted in Philadelphia. This study involved generating an inventory of SSE entities in the Philadelphia

[4] For this research, we use the concept “solidarity economy” rather than “social economy” or “social solidarity economy.” For the remainder of this essay I will primarily use SE instead of SSE, although in most cases either term could be used.

region, creating and testing an economic impact survey of those entities, and using GIS mapping methods and census data to study the geographic clustering of those entities. In the remainder of this essay, I will present some preliminary findings from that pilot study, which I directed. I focus on the aspects related to GIS mapping.

PART THREE: The Philadelphia Case Study

It will be useful to first provide some background about Philadelphia. With a population of 1.5 million, Philadelphia is the largest city in Pennsylvania, the second largest city (behind New York) on the U.S. East Coast, and the fifth largest city in the United States. It is in some respects a classic "Rustbelt" city. Its economic fortunes rose dramatically with industrialization in the early 20th century. This was followed by long periods of urban decline and deindustrialization in the second half of that century. The city's population peaked at around 2 million in 1950 and then declined until 2000, after which it has stabilized or grown slightly. Philadelphia has a sizable poor population. Over 25 percent of the city's population lives below the national poverty line.[5] This is almost double the national average of 14.3 percent. Roughly 200,000 of Philadelphia's poor population live in "deep poverty," defined as income less than half the national poverty threshold. The median household income in Philadelphia is $36,957, compared to $52,762 nationally. The city is, however, surrounded by relatively affluent suburbs, to which many upwardly mobile families move, leaving behind urban blight and a shrinking urban tax base.

The city also suffers from deep patterns of racial and ethnic division. The nonHispanic white and black/African American populations each constitute approximately 45% of the population, with the Asian population constituting around 7 percent. The Hispanic/Latino population, which the census measures separately from racial variables, constitutes approximately 13 percent of the city's population. Box 1 summarizes some of these and other core Philadelphia statistics.

Box 1: Philadelphia Demographic Statistics

Philadelphia 2010

Land area:	134 sq. miles
Population:	1,526,006
Population density:	11,380 persons/square mile
NonHispanic White:	41%
Black /African American:	43.4%
Asian:	6.3%
Hispanic/Latino*:	13%
Median Household Income:	$36,957
Residents below poverty line:	25.6%

** In the census, the concept of race is separate from the concept of Hispanic origin.*

Source: U.S. Census Bureau, http://quickfacts.census.gov/qfd/states/42/4260000.html

[5] The 2013 Federal poverty line for a single person is $11,490. For a family of four it is $23,000.

The fact that the white population is a minority in Philadelphia stands in contrast with demographics of neighboring counties, where large majorities—ranging from 72 percent to 90 percent—of the population are nonHispanic white.[6] In terms of this basic demographic composition, Philadelphia resembles other major cities such as Baltimore and Washington, DC, which have also experienced the flight of upwardly mobile white populations from the city center.

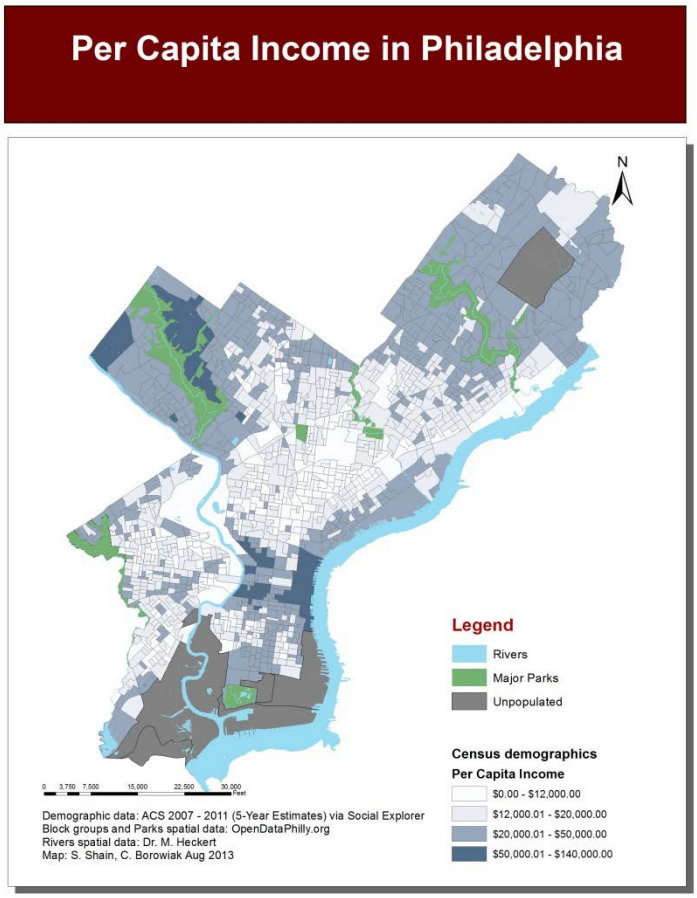
These aggregate statistics tell us useful things about the demographic composition of Philadelphia's population. They do not, however, tell us anything about how different demographic groups relate to one another. What is most interesting for our study is the way that different demographic categories of the population are distributed spatially in the city and how those spatial distributions relate to the SE. New Geographic Information Systems (GIS) software and mapping methods enable us to study such spatial patterns with considerable sophistication.

What is GIS? GIS is a system designed for capturing, storing, manipulating, analyzing, and presenting all types of geographical data. GIS mapping software works by allowing the researcher to superimpose different layers of geographic data on top of one another in a single map. Thus I can take a file that contains the outline—the shapefile—of a city like Philadelphia. On top of this image I can then put a data layer that represents, for example, the city's streets. On top of this I can put layers representing images of the city's parks and waterways. On top of this I can superimpose the image of census data organized spatially into color-coded blocks. I can then add different layers representing the location of particular entities: particular businesses, churches and mosques, playgrounds, gardens, and, most importantly, SE entities. The GIS software is designed to enable the user to activate or deactivate any of these individual layers with a click of the mouse. This makes it easier to control which data are being represented, which in turn enables the researcher to more easily visualize and examine the spatial relations among data. GIS mapping techniques are currently being used in the U.S. to study a variety of organizations that we might associate with the SE, including, for example, microfinance institutions and community gardens. We are proposing to use to analyze the SE as a whole.

When GIS is used to spatially analyze demographic patterns in Philadelphia, it becomes clear that the racial, ethnic and class divides in Philadelphia are also geographic divides with sharp separations between racially and ethnically concentrated neighborhoods. To visually demonstrate this, we have generated a collection of maps using U.S. census block data and GIS software. I present these below.

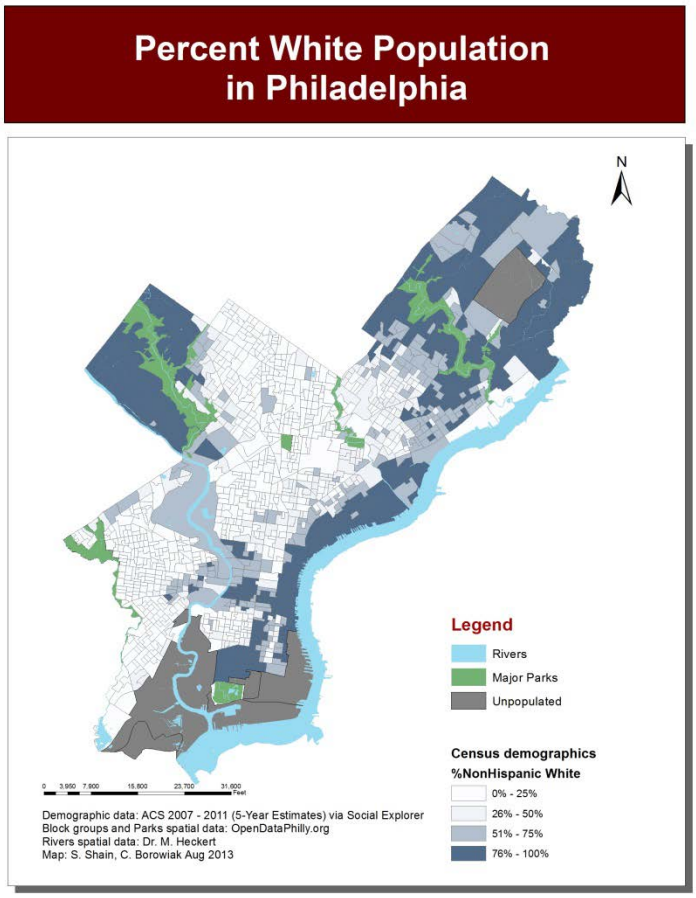
[6] Thirteen of the country's 40 largest cities have a minority white population.

Map 1



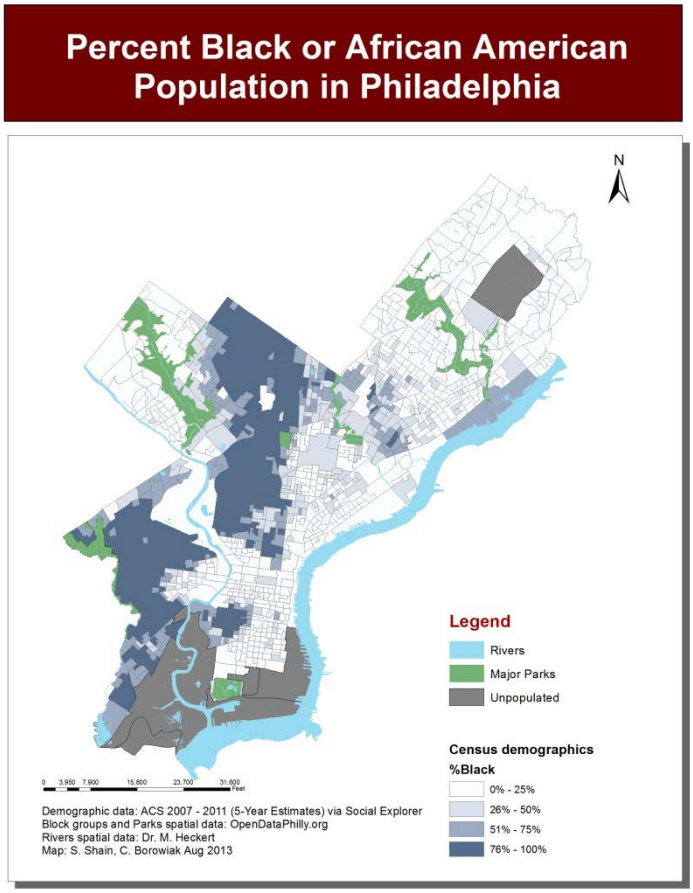
This first map shows per capita income in Philadelphia. Throughout the vast majority of the city, per capita income is under $30,000, with large swaths of the city living with per capita income under $12,000. Wealth in the city is heavily concentrated in the northwest and in the city center visible in the lower middle portion of the map. Just north of the city center, income levels drop drastically. Much of Philadelphia's poor population and most of its deep poverty can be found in the area just north of some of the city's highest wealth concentrations. As the following maps illustrate, these economic concentrations and disparities are correlated with racial/ethnic divides.

Map 2



Map 2 displays the spatial distribution of the nonHispanic white population. In this map, the color contrasts are immediately striking, with stark divides between neighborhoods that are over 75 percent white and neighborhoods that are less than 25 percent white. The greatest white concentrations are found in the center of the city and in the northwest. This northwestern region spans the scenic Wissihickon Park as well as the western half of the trendy Mt. Airy neighborhood, a neighborhood that also happens to be a hotspot for SE initiatives. When Map 1 and Map 2 are looked at together, it becomes readily apparent that the location of concentrated white populations are heavily correlated with areas of high income levels. Although not all blocks with a majority white population have high incomes, scarcely any high income blocks have a nonwhite majority. Such patterns of racial and class separation are further evidenced in the following map of Philadelphia's black population.

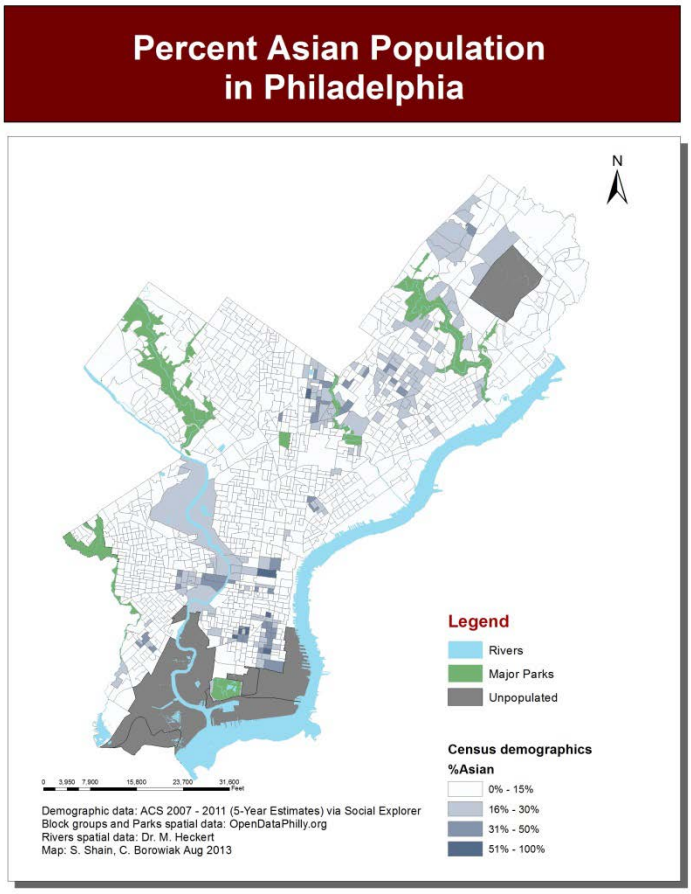
Map 3



In the western half of the city, the racial patterns visible in Map 3 are almost mirror images of those found in Map 2; it is almost literally black and white with few shades of gray. The black population is heavily concentrated in West Philadelphia and in a thick vertical band of north Philadelphia beginning on the eastern side of the same trendy Mt. Airy neighborhood. An additional concentration can be found in a small pocket of South Philadelphia. These concentrations are noticeably distanced from the concentrated wealth found in center city and along the Delaware River waterfront (on the East side of the map).

The demographics of Philadelphia are not, however, only black and white. Maps 4 and 5 show the spatial patterns of Asian and Latino populations, respectively.

Map 4

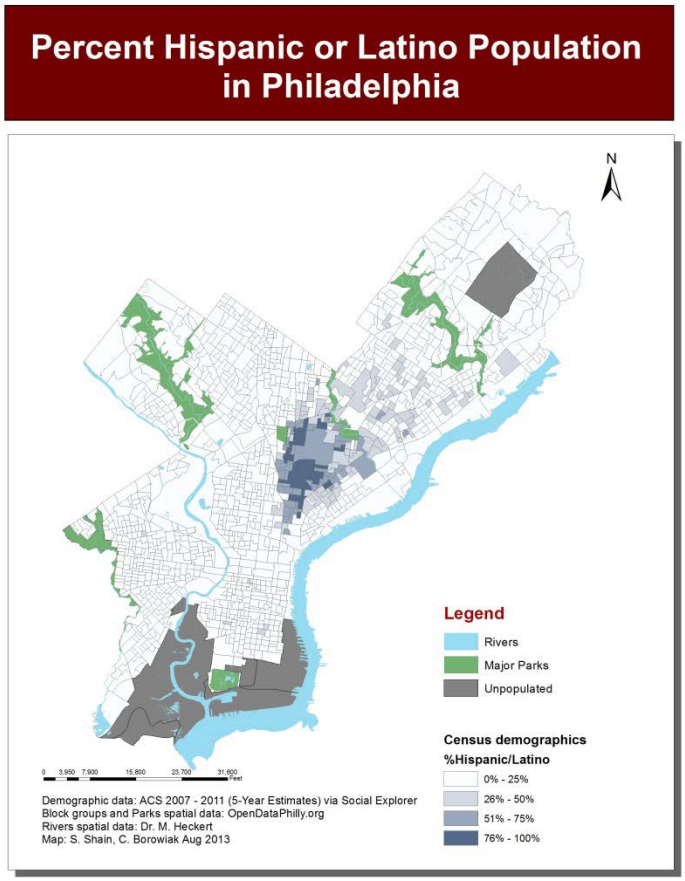


The size of the Asian population is much smaller than the other demographic categories. It is therefore not surprising that concentrations of Asians scarcely appear on the map, except, most notably, in Chinatown (represented by the darkest block at the center of the map) and, to a lesser extent, in several blocks in the northwest and a few blocks in the south of the city.[7] The pattern of the Latino population is more noteworthy.

As Map 5 reveals, the lines dividing majority Latino neighborhoods from other neighborhoods is as stark as those dividing majority white and majority black neighborhoods, even though the overall population of Hispanic/Latinos is far smaller.

[7] In order to increase the visibility of Asian concentrations, I have reduced the percentage intervals from 25/50/75/100 to 15/30/50/100.

Map 5



This Latino population (largely Puerto Rican) is quite visibly concentrated in an area of North Philadelphia shaped like an inverted triangle. What is so striking about this is that this relatively large area is also one of poorest areas in the city, as revealed in Map 1.

This collection of demographic maps provides a much more nuanced picture of the city's human geography. Let me now return to the solidarity economy. Why might the demographic patterns illustrated by these maps be of interest for scholars researching the social solidarity economy? The SE is frequently presented as offering an alternative development model that is capable of integrating marginal populations and bridging divisions within communities. In tough times, relations of economic solidarity are thought to provide ways for people who have been most underserved by the prevailing capitalist economy to get by. This is a theme that pervades SE scholarship. What, however, if it is only partially true? What if instead of counteracting structures of inequality and division the SE inadvertently reproduces them? What if the populations being served by SE initiatives actually come from elite, economically advantaged positions? What if the populations that are truly disadvantaged and that face the greatest hardship are in fact the least likely to see the benefits of the SE? What if some types of SE initiatives serve rich communities whereas others serve poor ones? This would be important to know. What the demographic maps enable us to do is to identify some of the geographic contours of poverty, economic hardship, and racial division. It enables us to identify some of the places least served

by the status quo and some of the places most in need of alternatives. It also enables us to analyze existing SE practices to see how well they reach into those communities. The assumption, which is not without critics, is that spatial geographies can tell us something about the nature of the communities being served or underserved by particular economic practices.

In order to conduct this kind of research and analysis, we need to create an inventory of SE entities and their physical locations. This is what we've done in Philadelphia. Despite its difficulties, Philadelphia is a city with many thriving urban subcultures and numerous initiatives for urban renewal. Community development corporations have long had a presence in the city, and alternative economic practices ranging from community gardens and community supported agriculture to credit unions and microfinance institutions are growing in popularity. The city has a thriving new cross-sectoral network of cooperatives, a relatively responsive city council, and a relatively deep pool of community activists. In this context, a team of faculty and student researchers based at Haverford College (located in a suburb of Philadelphia) have generated a spatial database of SE initiatives in Philadelphia and the surrounding region. We used the following typology of SE organizations as our guide. See Figure 5.

Figure 5: Typology of Solidarity Economy Entities

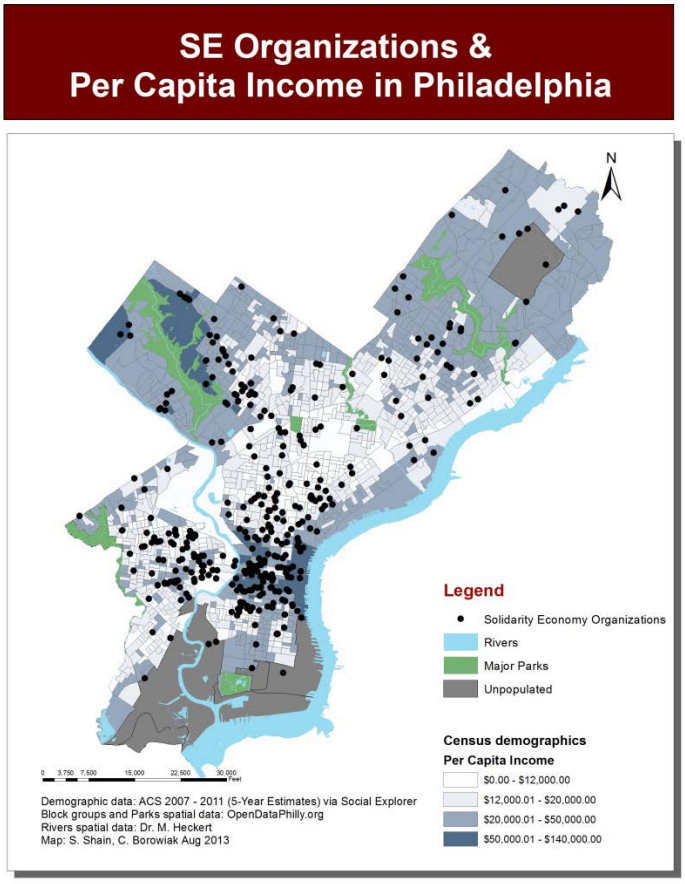
Alternative Consumption	Alternative Production	Alternative Finance	Alternative Exchange	Governance
Consumer cooperatives Buying Clubs Co-housing Intentional communities Housing Cooperatives Community land trusts	Worker cooperatives Producer cooperatives Volunteer collectives Community gardens Collectives of self-employed Unpaid care work	Credit unions Community development credit unions Peer lending	Fair trade networks Community supported agriculture and fisheries Complementary currencies Barter networks Free-Cycle networks Time banks	Participatory budgeting Collective community management of resources

This typology was created in collaboration with the U.S. Solidarity Economy Network. It breaks the SE down into different organizational types, some of which are more unique to the U.S. than others. The underlying assumption is that organizational structure can be at least a proxy for SE practice. The typology itself does not, for example, differentiate between cooperatives that reflect SE principles and those that don't. It leaves it to researchers to make those assessments on their own. Using this typology, we have identified over 440 SE entities in the greater Philadelphia area. We then separated out SE practices that have physical locations from those that don't. We then isolated those that have physical addresses within the official city limits. Finally, we used GIS software to plot their coordinates on the sort of demographic maps

displayed above with Maps 1-5.[8] The resultant maps include distinct spatial data about the following categories of SE entite: volunteer collectives, worker cooperatives, consumer coops, daycare coops, artist cooperatives, cooperative housing (housing co-ops, co-housing, intential communities), land trusts, community development corporations (CDCs), commnuty gardens, B-Corporations, credit unions, community development credit unions (CDCUs), and a variety of other solidarity finance organizations. In the future we will incorporate spatial data from additional organization types.

Our hypothesis is that spatially organized demographic variables are significant for the SE. If we are wrong, and the SE is actually demographically neutral, we would expect to find SE initiatives distributed across the city in patterns that are indifferent to the demographic geography. When we plot all of our SE data on the map, it indeed looks relatively well distributed across the city. Map 6 does this using per capita income as the background variable.

Map 6

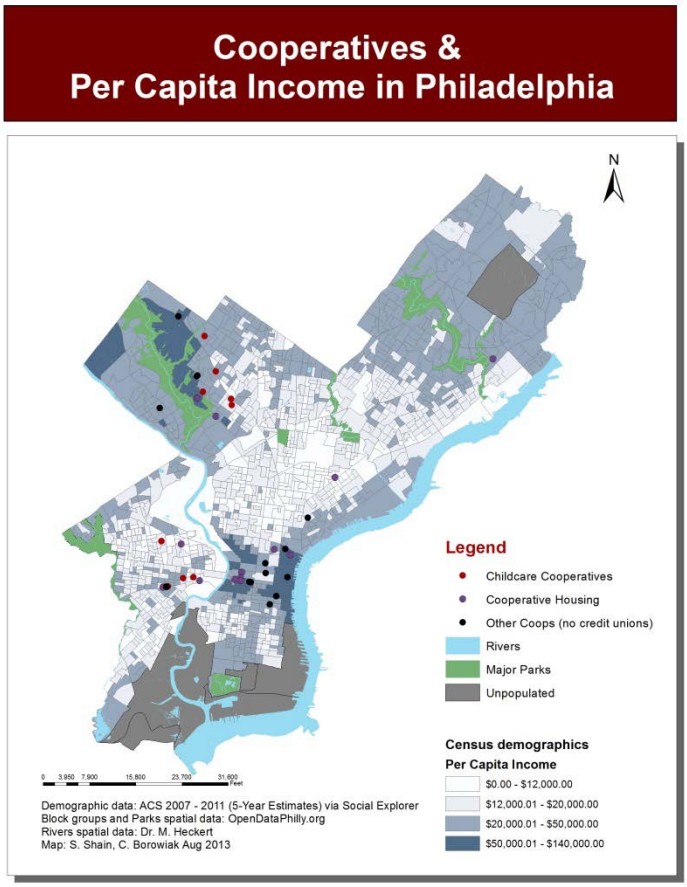


The SE initiatives are surprisingly well-distributed, with the numbers thinning out as you move away from the center of the city. The few areas on the map where SE entities cannot be found

[8] Many SE entities, such as buying clubs and time banks, don't require a physical address in the same way that a retail food cooperative or community garden does.

tend also to be areas where the population density is very low due to the presence of parks (West Philadelphia), cemeteries (North Philadelphia), or industrial waterfronts (East Philadelphia). The demographic neutrality of the SE would thereby seem confirmed. The story, however, changes if we disaggregate the data into different types of SE initiative. Map 7, for example, maps the locations of the city's cooperatives, excluding credit unions and CDCUs.

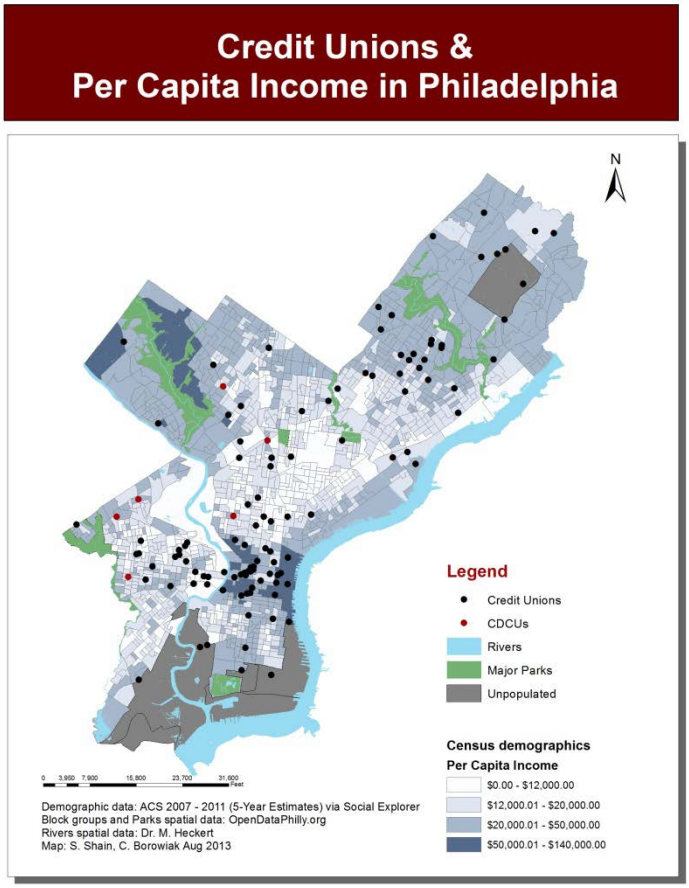
Map 7



What stands out about this map is how few of the coops can be found in the city's poorest regions. One of these is a religiously inspired intentional community in North Philadelphia. Two others (both in West Philadelphia) are located in the middle of the University of Pennsylvania campus, where students drive down the per capita income levels. It is also telling that many of the coops that are closest in proximity to the poorest regions are childcare cooperatives, which presumably serve a need for affordable childcare that richer communities do not share in the same way.

Other types of SE initiative do far better. Credit unions, for example, can be found across much of West, North and Northeast Philadelphia, well outside of the most prosperous communities. See Map 8.

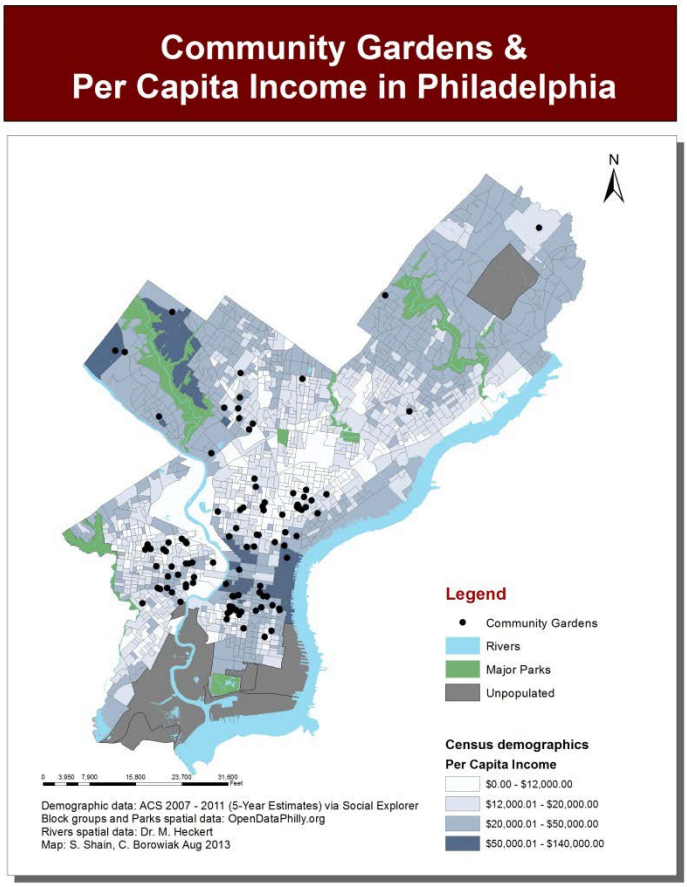
Map 8



But credit unions, too, are virtually absent from the area of direst poverty in North Philadelphia. This is even true of CDCUs, despite their explicit mission to support disadvantaged communities. Community gardens seem to perform better in this regard, as illustrated in Map 9.

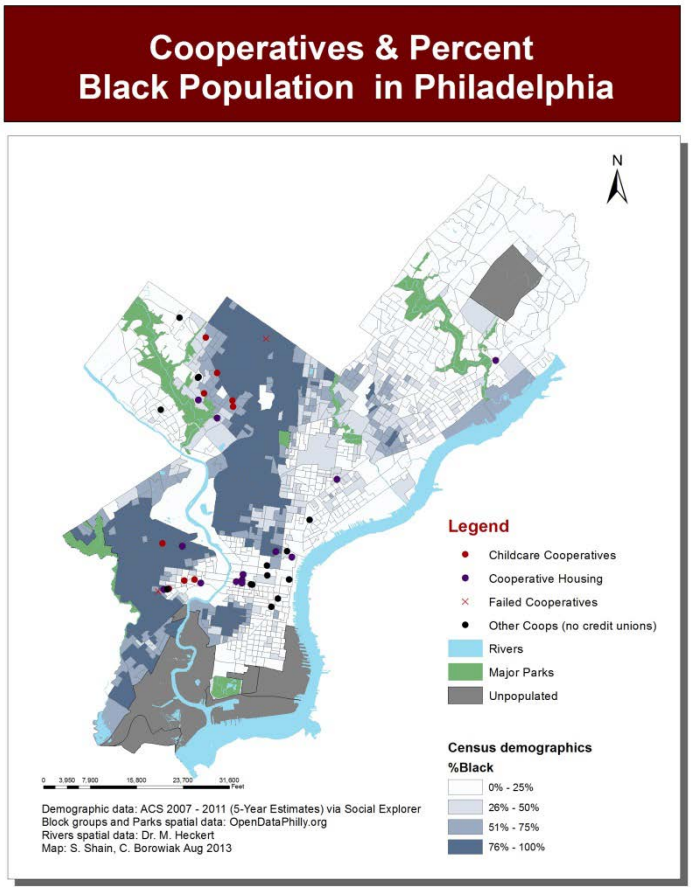
Although they don't reach as far into the Northeast of the city, they are quite prevalent in impoverished areas north, west, and south of the city. This is perhaps to be expected considering that the produce from such gardens is acquired through the work of one's hands rather than through income generated with a wage.

Map 9



If we shift the focus from income to racial demographics, the findings are sharper, much like the racial divisions themselves. Maps 10 and 11 plot cooperatives against the black population and the white population, respectively.

Map 10

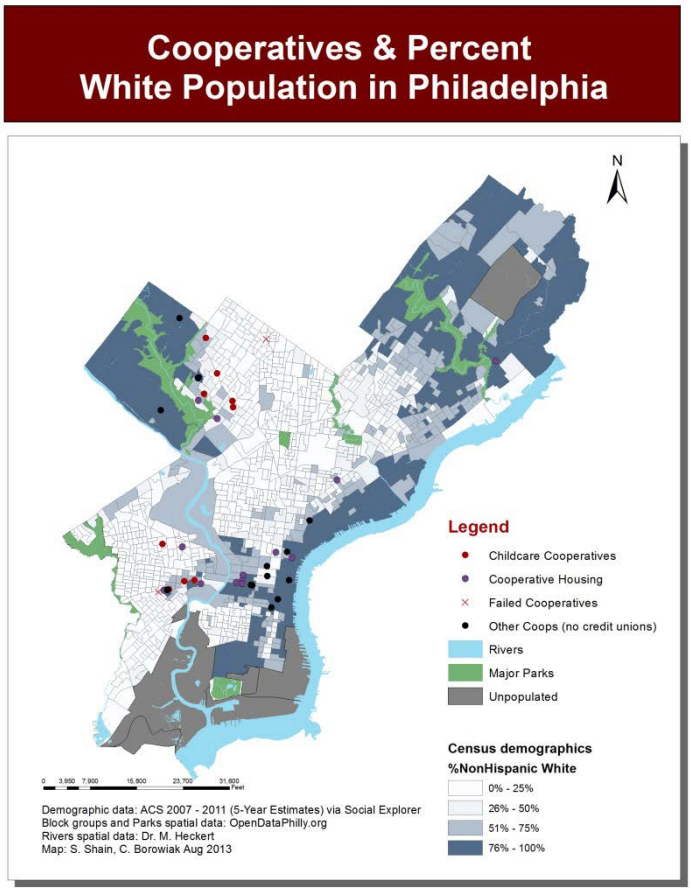


With the exception of one daycare cooperative and one housing cooperative—both in West Philadelphia—none of the cooperatives are found in neighborhoods where black populations are most concentrated. It is almost as if the cooperatives are patterned to frame the majority black neighborhoods. They skirt the edges and reach towards predominantly black neighborhoods, but they never enter them. This is the case along Germantown Avenue in the Mt. Airy neighborhood of Northwest Philadelphia, in the areas west of the University of Pennsylvania in West Philadelphia, and in the lower portion of North Philadelphia. As Jessica Gordon Nembhard has observed, there is a tendency among black communities to perceive cooperatives as a "white thing." This is the case despite the long history of African American cooperatives, much of which Nembhard (2004) has documented. Map 10 also includes the locations of two cooperatives that recently failed. One was a food cooperative. The other was worker cooperative providing community-based acupuncture. Both were efforts on the part of established cooperatives to reach into new communities. The fact that both were trying to succeed in relatively poor communities with predominantly black populations is conspicuous. Their failure would seem to confirm the larger pattern, even if qualitative investigation is necessary to determine the actual causes of their failure. Among cooperatives, credit unions are somewhat different with regard to these racial patterns. Even a brief glance back at Map 8 reveals this. It is also the case that credit unions tend act more like regular capitalist firms than most other cooperatives do. Still, it is worth noting that over a third of the credit unions in West and North Philadelphia, where the concentrations of the

black population are the highest, are small church-based credit unions or community development credit unions. Depending on one's perspective, this can be seen as an indication of greater financial solidarity and community in these communities or as an indication of the difficulties of scaling up solidarity-based finance in these regions.

The map of the white population reveals a related pattern. See Map 11.

Map 11

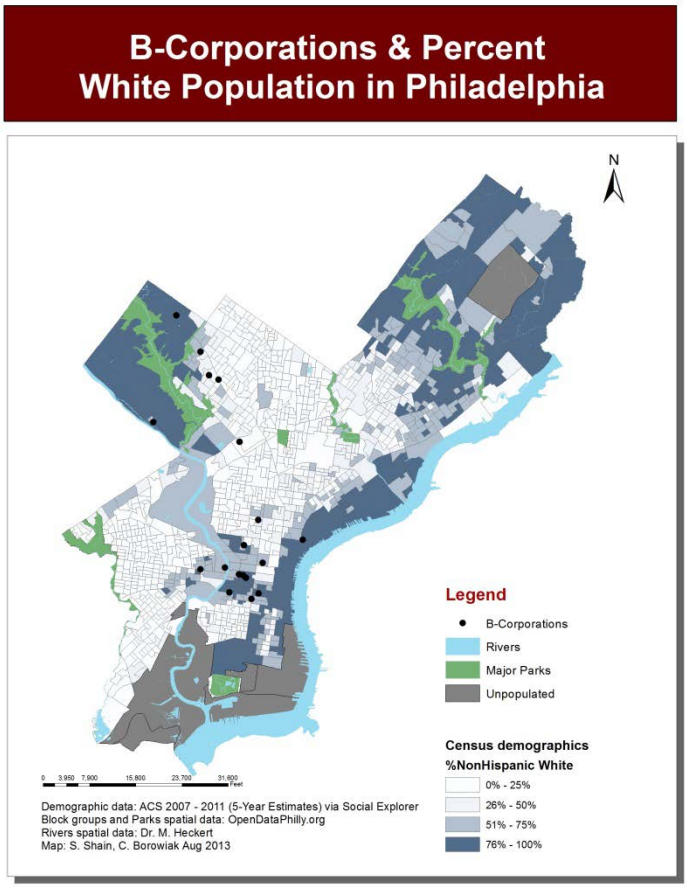


Interestingly, however, the pattern is not simply the obverse of what we found in Map 10. Although several cooperatives can be found in the neighborhoods with the most heavily concentrated white populations—in contrast to what we found with the predominantly black neighborhoods—it is not the case that all or even most cooperatives are found there. In fact, the majority of cooperatives appear to be located within the relatively thin border zones separating white and nonwhite communities. We can imagine several explanations for this. The border zones might themselves coincide with significant business corridors that both attract all sorts of business and provide a natural dividing line between communities. There are reasons why the expressions "from the other side of the street" and "from the others side of the track" are colloquial ways to designate people with different class or ethnic backgrounds than one's own. The border zones might also attract a certain type of organizer or activist. Perhaps social justice-minded white activists are more likely to live in and start up a cooperative in a border zone than

in the heart of wealthy white communities. But perhaps they are also not able to do so in an environment where they would be the distinct minority. Or perhaps border zones are where progressive ideas thrive. This is all speculation. What the map has done is raise it as a puzzle.

To explore this border-zone pattern further, we mapped another category of SE entity: B-Corporations. B-Corps are companies that have institutionalized a commitment to what is referred to as the triple bottom line: the environmental bottom-line; the social bottom-line; and the financial bottom-line. To count as a B-Corp a company must be certified, much like fair trade products are certified. This certification is carried out by a Philadelphia-based non-profit organization called B-Lab. There are currently approximately 760 B-Corps worldwide. Map 12 plots the Philadelphia B-Corps with data on the white population.

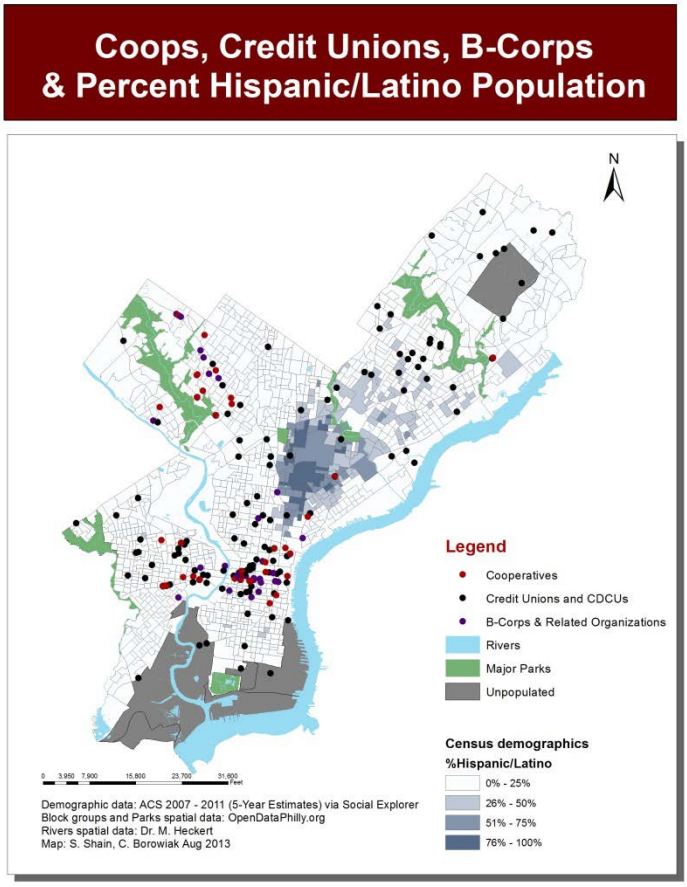
Map 12



The pattern is not dissimilar from what we found with cooperatives: Heavy concentrations near the city center, some B-Corps in the most heavily concentrated white neighborhoods, and a large number in more demographically mixed areas, but virtually none in majority black neighborhoods. Four B-Corps (in lower North Philadelphia and in Northwest Philadelphia) appear to be located in neighborhoods where the white population is a clear minority. Further investigation reveals, however, that three of these have only white employees. The fourth, a coffee shop with a mixed group of employees, caters primarily to a white clientele. All of this seems to confirm our observation about a racialized pattern within the SE.

The racialized patterns are arguably even more pronounced with the Hispanic/Latino population and that inverted triangle of poverty located at the center of the map. Do SE initiatives reach there? In Maps 13 and 14, I have mapped the locations of various SE entities in relation to Philadelphia's Hispanic population.

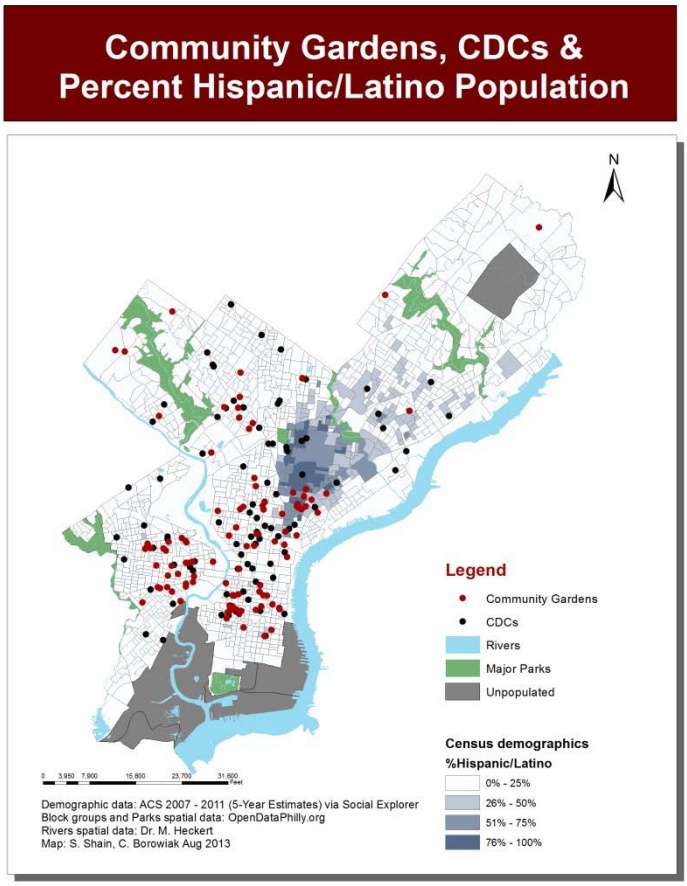
Map 13



Map 13 adds credit unions to the cooperatives and B-Corps that I discussed above. The addition of credit unions certainly expands the range of the SE. Nevertheless, virtually none of these entities extend into the predominantly Latino neighborhoods. This would seem to suggest that the Latino populations are largely underserved by the SE. This is an especially interesting observation given how strong the SE has become in many Latin American countries. When, however, I plot a different set of SE entities against the same demographic data, a different impression emerges.

Map 14 looks at Community Gardens and Community Development Corporations (CDCs). Both types of SE entity reach squarely into these neighborhoods.

Map 14



This variation in the SE's reach is important. It leads us to ask "Why?" What are the causal mechanisms underlying these different spatially patterned distributions of SE activity? In this case, it is hard to separate out economic variables from cultural ones, given how closely the Latino neighborhoods coincide with areas of deep poverty: in some of these blocks, many of which are homes to large families, per capita income is below $8,000. The fact that CDCs and community gardens seem to fare better at reaching these communities can, at least in part, be attributed to their differences from other SE initiatives. SE initiatives like credit unions, B-Corps, and commercial consumer cooperatives all depend upon the saving power and disposable incomes of community members. Residents in poverty stricken areas, however, often lack the disposable income and saving capacity to sustain even solidarity-based companies. CDCs, by contrast, are often deliberately organized within an impoverished community with the express purpose of bringing about improvements in that community. This they often do with externally subsidized funds. Additionally, several of the CDCs in this region of Philadelphia are motivated with explicit concern about the health of the Hispanic/Latino community. Community gardens, in turn, stand out because they offer a way to generate livelihoods without the need for much disposable income. In fact, one of the appeals of community gardens is that they help offset the lack disposable income by substituting community-grown produce for food items that would otherwise be purchased from groceries. There is also a significant history of community gardening among Latino immigrants in the United States, which might make this a more

appealing mode of solidarity economy than less familiar organizational forms (Saldivar-Tanaka and Krasny 2004). These observations are, however, speculative in character. GIS maps are very useful for exposing spatial correlations. They are less useful when it comes to identifying causal mechanisms. Good causal explanations would require qualitative, ethnographic research to learn more about what is happening on the ground and why communities and businesses are behaving as they are where they are. That sort of research will be undertaken in subsequent stages of our current research project.

PART FOUR: Limits of This Type of Mapping

I have used the maps above to illustrate a set of spatial relationships between a variety of SE initiatives and Philadelphia's demographic geography. In the process, I have sought to introduce and promote this sort of mapping as a way to enhance SE research. It is nevertheless important to acknowledge some of the methodological challenges this type of geographical analysis faces. I identify several of these challenges below.

First, as I alluded to earlier in the paper, these sorts of maps are only able to represent initiatives that possess a physical address. This excludes a large number of SE activities that don't rely upon singular locations. For example, there is a worker cooperative in Philadelphia that offers doula (i.e., childbirth) services around the city. The women who own and run this company do so without a single office; they manage the business from their individual homes. It is not at all clear how they might be put on the map. Similarly, buying clubs, complementary currencies, time banks, babysitting collectives, and similarly networked practices are far more difficult to represent on any map. The consequence is that such maps may tend to underrepresent the size of the overall SE while overemphasizing the importance of those organizations that do rely upon a single physical address.

Even for SE entities that do have a physical location, maps such as these can be misleading by implying that that physical office location is strongly correlated with organization's impact on a community. Different SE entities, however, have different spatial organization. Some are stand-alone entities whereas others are networks of consumers (e.g., large consumer cooperatives, energy cooperatives, and community supported agriculture). Some are locally-oriented whereas others operate at regional and national levels. Some pursue solidarity among their workers whereas others cultivate solidarity among consumers and communities. These differences have implications for how these entities should be represented spatially and how their geography should be analyzed. The location of a credit union, community garden, cohousing arrangement or food or childcare cooperative might be closely tied to the communities who use and benefit from these organizations. But this is not the case for a variety of other organizations. New transportation and communication technologies have made economic activity much less place-based than it used to be. Consumers can consume from far away and workers in many industries can labor far away from their customers. A worker cooperative might draw its workers from one neighborhood (or, more likely, from many different neighborhoods) while being based in an entirely different neighborhood (perhaps a more commercial one). The coop's end users might be located in still other neighborhoods. To give one example, the Energy Cooperative in Philadelphia is a consumer cooperative that provides locally produced sustainable energy to its members. Its offices are based in Center City, Philadelphia. Two-thirds of its members and some

of its employees, however, reside outside the city in the surrounding suburbs. The relatively simple maps I've generated here fail to capture this information. This raises questions about data. Which data should we be looking at to assess the relations between SE activities and demographic variables? The physical locations of offices might tell us something. Additional information might come from surveys of membership, users, and workforce. That data, however, is far more difficult to acquire for such a large and diverse set of practices.

The data is also only as good as the data collection. Perhaps our research team is not looking hard enough or in the right places. It's possible that we're looking for practices that are already racially and class coded in ways that render other forms of solidarity economy invisible. For example, the solidarity exercised in the poorest Latino communities might be more informal and kinship based, which would make it far more difficult to identify and incorporate into this study. Or perhaps what makes the SE seem more like a "white" phenomenon than a "black" or "Latino" one is the tendency of white communities, for whatever reason, to exercise economic solidarity through formal organizations whereas other populations exercise economic solidarity through more informal networks, kinship, and religious communities (i.e., the church). If this is the case, and I expect it is, our data and conclusions about the overall reach of the SE will be skewed, even if our data about many particular forms of SE are accurate. It's also possible that a cultural bias has been built into the data collection insofar as the data collectors (who are themselves culturally white and middle class) have greater access to relatively affluent white communities than they do to Latino, Asian and black communities.

Finally, as I've already hinted at, these maps are not particularly good at establishing causation. These maps are useful for visually representing correlations among spatial data. They are far less useful when it comes to explaining why those correlations exist. More in-depth quantitative and qualitative research needs to be done to establish causality. This brings us back to the particularity of the organizations themselves. This sort of sociological mapping of the SSE needs to be complemented with detailed information about the individual entities that it maps. That is the only way a compelling narrative can be told about why the patterns exist as they do.

We also need to be wary of overgeneralization. The conditions in Philadelphia might not be replicated elsewhere. A less divided city might, for example, not provide the same sort of visible contrasts and mapping results. Similarly, the demographic variables might prove insignificant in a smaller city with fewer neighborhoods and fewer commercial areas. The location of SE organizations might have more to do with the location of the city's one or two major commercial corridors. In Philadelphia, by contrast, the locations of particular economic corridors don't override the significance of race and class divides. On the contrary, they often reproduce those divides.

Conclusion

In this essay, I've presented an alternative way of mapping the social and solidarity economy. This mode of mapping is both more sociologically oriented and more rooted in the methods of human geography. It aims to identify larger spatial and demographic patterns in the way the SE is organized. Doing so can help the SE movement identify both communities in need of

development alternatives and biases inherent in the SE practices themselves. If existing initiatives to map the SE focus on making individual SE enterprises visible, this type of mapping focuses on making underserved communities visible for SE development. In this respect, it puts geospatial and information technologies in the service of economic and social empowerment (Pavlovskaya 2006).

I have used these mapping technologies to illustrate a set of spatial relationships between SE initiatives and Philadelphia's demographic geography. I have suggested that even though the SE as a whole might appear to span the city in a manner that is demographically neutral, this is not the case when the different categories of SE activity are disaggregated. Specifically, I have suggested that many categories of SE entity do not do well at reaching poor neighborhoods. CDCs, credit unions, and community gardens seem to fare better than others. SE organizations that rely upon a community's disposable income seem to do worse. I've also observed that the SE is more prominent in predominantly white communities than in nonwhite ones. This observation needs to be qualified, however, with the further observation that border zones between racially/ethnically concentrated communities seem to serve as rich sites for SE development. Why this might be the case requires further investigation.

The fact that different categories of SE activity cluster spatially in racially and economically significant ways introduces a new dimension to contemporary SE research. It illuminates the importance of both geography and demographics. And it potentially opens new lines of inquiry into the SE and its relation to race and class. Concern about ethnic/racial minorities and the economic underclass is ostensibly vital to the core philosophies under the SE movement. Nonetheless, the SE movement (or at least segments of it) has also been criticized as a middle class movement that ultimately does very little to bring about the radical restructuring necessary to truly address the root causes of poverty and socio-economic injustice. Using maps such as I have can hopefully carry us some way towards assessing the depth of such shortcomings.

Ultimately, maps such as these do more to open questions than they do to answer them. For this reason, in the next stages of our research in the U.S., we will complement our geographic analysis with qualitative interviews and quantitative studies of economic impact. A fuller picture of the SE, its impacts, and its causes in these regions will hopefully emerge.

Bibliography

Evers, A. and J.-L. Laville. 2004. “Defining the Third Sector in Europe,” in A. Evers and J.-L. Laville (eds.), *The Third Sector in Europe*, Cheltenham, Edward Elgar, pp. 11-42.

Gibson-Graham, J.K. 2005. *Post-Capitalist Politics*. Minneapolis: University of Minnesota

Howard, Ted, Lillian Kuri, and India Pierce Lee. 2010. "The Evergreen Cooperative Initiative of Cleveland, Ohio." *A Sense of Place: Place-Based Grantmaking in Practice*.

Miller, E. 2006. “A Map of the Solidarity Economy.” *Dollars and Sense, 266*.

Nembhard, Jessica Gordon. 2004. "Cooperative ownership in the struggle for African American economic empowerment." *Humanity and Society Vol* 28, No. 3.

Pavlovskaya, M. 2006. "Theorizing with GIS: A tool for critical geographies?" *Environment and Planning* 38 (11): 2003-2020.

Pearce, J. 2003. *Social Enterprise in Any Town*. London: Calouste Gulbenkian Foundation.

Pestoff, V.A. 1998. *Between Market and State: Social Enterprise and Civil Democracy in a Welfare Society*. Ashgate. Aldershot.

Saldivar-Tanaka, Laura, and Marianne E. Krasny. 2004. "Culturing community development, neighborhood open space, and civic agriculture: The case of Latino community gardens in New York City." *Agriculture and human values* 21, No. 4: 399-412

Safri, Maliha. (Forthcoming). “Mapping Noncapitalist Supply Chains: Toward an Alternate Conception of Value Creation and Distribution” *Organization*.

Wright, Erik Olin. 2010. *Envisioning Real Utopias.* New York: Verso