Epistemological Synergy: Futuring As Sustainable Enactment Through A Public Sociology - presented at ESA 14 Manchester University, Manchester UK 2019.

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I. Introduction

Public sociology raises issues of the public roles it plays, accountability and integrity of the various epistemologies used, and disciplinary constraints through the increasing complexity of social issues at the intersection between local/global.

Nevertheless, specializations within and across the social sciences present possibilities of multidisciplinary perspectives and levels of engagement with the public (Bridger and Alter 2010). As public sociology calls for the engagement of different disciplines in the social sciences and universities with their publics (Burawoy, 2005), negotiating disciplinary boundaries is necessary to remediate “wicked problems” inherent in contemporary and future social ills especially in terms of co-envisioning and co-creating futures with those publics.

Laying particular knowledge claims to shaping the future assumes a sense of ownership to a future that is uniformly agreed upon, when what may be a desired future to one group may be a repressive prospect to another (Adam, 2008). Discussions over the future are contestable, therefore, issues of representation, inclusion and dialogue are key if the goal of design interventions is both to address problems and achieve useful solutions.

Paraphrasing Bell (2009), “how can social scientists (and others) enter the public sphere working effectively with wicked social problems and questions of futuring across allied disciplines?” In addressing this question we place particular focus on the potential for critical engagement with questions of the future and mutual learning out of expert-public knowledge exchanges through a situated approach to using methodologies, tools and practices attached to different disciplinary traditions. We propose a synergistic engaged scholarship (Boyer 1990/1996) through the intersections of public sociology and “design as social innovation/transition design.” (Manzini 2015, Irwin 2018)
II. Framing contemporary “wicked problems”: issues of representation, knowledge and power in public engagement

Rittel and Weber outlined the basis of “wicked problems” in distinction to more classically understood ways of solving problems circa 1969-1973. Interactive connections between social, technological and economic etc. systems create dynamic, complex (and therefore “wicked”) problems, contrasted with solution finding as a clearly defined response in more self-contained systems, asking in part “what should a solution do?...what are desired outcomes?” (Rittel and Webber 1973 p.157):

We have been learning to see social processes as the links tying open systems into large and interconnected networks of systems, such that outputs from one become input to others. In that structural framework it has become less apparent where problem centers lie and less apparent where and how we should intervene...Social problems are never solved. At best they are only re-solved—over and over again. (Rittel and Webber 1973 p.160)

Contemporarily, globalization and the scale and interaction of technological and economic systems has grown much more complex. Local “systems” interact with larger cultural economic and technological systems in an accelerated, almost stochastic manner, where “wicked problems” therefore arise or are exacerbated through these complex interactions at various scales and across cultural boundaries. Whatever “wicked problem” is defined is also much more dynamic as well. Essentially “wicked problems” collapse the polarity between techne and understanding, or research and practice, since they are enmeshed in localities with particular economic and cultural qualities and resources.

Yet, in instrumental and institutionalized design “complexity” often stays in the realm of conceptualization through the management of collaboration, consensus and negotiation mainly between corporate sponsors and experts who respond to briefs with speculative prototypes that may or may not get applied into consumer-based design solutions in products and services. Such an efficiency- and expert-driven outlook to public engagement however runs the risk of reducing participation to an abstraction. Importantly, it results into a disconnect between communities and their material practices, resources and potential cultural sustainability.

Failing to acknowledge all stakeholders in the situation / problem at hand, their diverse vantage points and amount of say in decision making may compromise their agency and perceived capacity to envision and suggest solutions for future sustainability. Therefore, issues of knowledge claims and power become a dominant factor. The question, therefore, to ask in expert-public knowledge exchanges is not only who holds power but also how power circulates and how engagement happens—for example, whose perspectives are legitimized, how information is presented, whether participants’ role is prescribed and reactive to ready-made solutions, or seen as actively shaping the agenda (Masuda, McGee & Garvin, 2008).

How we define context is therefore key. From a design perspective, the proposal and implementation of various ideas and strategies stemming from “Transition Design” suggest that more sustainable futures can be derived from local and regional contexts:
Transition visions would propose the re-conception of entire lifestyles where basic needs are met locally or regionally and the economy is designed to meet those needs, rather than grow for its own sake. The exploration and critique of “everyday life” is a field within social theory (Lefebvre 1991; Gardiner 2000) that has the potential to become a powerful conceptual locus for the design of needs satisfaction in place-based ways. (Irwin 2015)

However, to paraphrase Harding (1993, p. 74), can social design ‘have it both ways’, i.e. produce ‘real’, scientifically-driven knowledge that is simultaneously socially- and culturally-situated? Harding makes a compelling argument that ‘strong objectivity’ requires ‘strong reflexivity’, and that ‘scientists and their communities be integrated into democracy-advancing projects for scientific and epistemological reasons as well as moral and political ones’ (1993, p. 69). One of these projects is to question the normalization of legitimate knowledges and voices—typically expert scientific, professional, policy, etc.—and thereby the potential inadequacy of their established conceptual and methodological frameworks to explore and explain the social world.

“Design as Social Innovation” and “Transition Design” are predicated on bringing together multidisciplinary experts and local knowledges, (Manzini 2015) and with public sociology provide a range of theoretical and applicable perspectives under the rubric of sustainability. How do we create the methods and tools and interactions that can foster this?

III. Social and boundary objects enabling action and reflection in community engagement

a. Example: The Stoa Malakopi project: Crossing scholar-public boundaries and creating touchpoints for social engagement

Our initial collaboration explored local entrepreneurship in Stoa Malakopi, a historically important commercial arcade in Thessaloniki, Greece, working with graphic design and social science students from North Carolina State University (NCSU), USA, and the American College of Thessaloniki (ACT), Greece.

The data collected included archival and historical reviews of Thessaloniki’s commercial arcades; transcripts of stakeholder interviews, and; narrated photo-documentation of stakeholders’ spaces, and their personal archives. These informed the creation of informational posters and a video compilation aimed to function as discussion objects (Liebenberg, 2009) with the community around issues in the arcade and their visions for sustainable entrepreneurial and urban development.

Our multimodal approach was driven by a focus on how best to capture the lived experiences of the stakeholders now, and contrast them to their past entrepreneurial trajectories and histories. This led to a critical interrogation of participants’ experiences and values, zooming in and out of past and present community and personal practices and uses of the space. The process of data analysis thus created opportunities for open dialogue among the students—one that centered on stakeholders’ perspectives as opposed to discipline-led interpretations and problem
solving—and with the participants, who played an active role in creating the posters by offering feedback on their portrayal and critical reflection on their accounts.

Posters and the video became visual touchpoints as ‘social objects’ enabling iterative discussion. For example, a visual juxtaposition of the façade of the building in the mid-20th century and its presentation today triggered contemplation on the ways in which issues of cleanliness and graffiti could be collectively addressed, given that Stoa Malakopi is a listed building.

![Fig 1. Stoa Malakopi in 2017 and in the early 1950's.](image)

b. Other examples of social objects

Social objects can be thought of as sharing different interpretations as a form of description, and are context and group dependent. For example, artist Fred Wilson often utilizes existing museum collections and “re-curates” them creating different interpretations of objects and narratives reflecting a different viewpoint of North American history. In design research, the use of designed kits as “cultural probes” in engaging users in research is another example.

Fig 3. Design kit as “cultural probes.”
c. Boundary objects

Star and Greisemer’s (1989) “boundary objects” are different from understandings of social objects and present a method of analysis. Boundary objects are collections of objects ordered in a standardized way as methods of common communication across dispersed work groups or—“people getting things done without consensus.”

Within a particular group or discipline, the boundary object can be discussed using the specialized language of a discipline. Negotiating ideas between specialized groups however can be more “ill-defined” where each group attempts to find a more common frame of reference to communicate to the other groups. The boundary object grounds the experiences between the groups.

For example, naturalists may work with state administrators, where maps of the state of California act as a boundary object as nature preserve and as administrative district.

![Maps of California](image)

Fig 4. Image of two maps of California.

Or, this online map platform supports conversations both within and across different groups. It can be further built on with additional interpretive layers that help visualize urban space usage in community discussion. Boundary objects in urban spaces are often revealed in shared infrastructure such as transportation etc.
III. Boundary objects and prototypes enabling actionable engagement

a. Embedding design tools in ethnography and Participatory Action Research

Design and visual tools can support community stakeholders to visualise, contextualise and make clear abstract concepts, textual analyses, and future processes and practices in forms that support conversations, interactions, and co-ideation (Mazé, 2019). As such they can expand applications of ethnographic and other social science methods in community engagement.

Ethnographic research, for example, produces rich, place-bounded narratives and offers in-depth understandings of community practices, rituals, histories and values from an insider perspective. At the same time, however, it has been suggested that it suffers from poorly grounded work and a lack of methodological rigor, which may partly derive from a focus on an inductive, hypothesis generating approach, which may not be matched up with deductive, hypothesis testing approaches. In fact, however, ethnographers do engage in ‘recursive cycles of hypothesis generating, testing, reformulation, and generation’—all of which require both inductive and deductive reasoning’ (Le Compte, 2002, p. 286).

What appears to be problematic, however, is that the “thick descriptions” which offer good evidence and analytical rigor in ethnography, are “lost in translation” when crossing disciplines or when transplanted in policy documents. This is where design objects can be valuable anchors helping to substantiate social actors’ and systems’ relations across space and time, compare and contrast personal and collective values and interpretations as these shift from one geographical, cultural, virtual/digital context to another.
Participatory Action Research (PAR) is another form of social inquiry where applications of design objects can support individual and collective reflections on social phenomena, leading to shared narratives and knowledge transactions at different stages of the PAR cycles. PAR is a form of collective self-reflective enquiry where researchers and social actors engage in critically examined action. They work collaboratively in order to improve the rationality and justice of their own social practices, as well as their understanding of these practices and the contexts in which these are carried out (Kemmis and Taggart, 1988, p. 5-6). Key characteristics of PAR are that it (a) unfolds in cycles of action and reflection; (b) is driven by communities rather than experts, and (c) is intended to result in some action, change or improvement on the issue being researched.

![Participant Action Research](image)

**Fig. 7.** A PAR cycle. Modified, based on Crane & O’ Regan, 2010, p. 11.
Embedding design and visual tools as social or boundary objects at different moments of PAR can support these iterative cycles of action and reflection in a dialogical fashion. Importantly, it can help to make critical transitions from participants’ personal experiences and emotional responses to collective social analyses and development of proposals for action. Such touchpoints could be journey maps, personas, participant photography, or diary accounts. Participant photographs, for example, could become a tool for observing and documenting individually one’s own environment whilst, at a later stage, a reflection and interpretative tool used collectively. Thus, such tools not only critically bridge processes of action and reflection but iteratively also trigger and build up to next research cycles.

In this light, the research process starts from understandings of phenomena as experienced by those people directly and mostly affected by the issue under investigation without flattening and reducing the multiple stakeholder voices into abstracted speech (academic or stereotyped lay), but also without compromising critical intellectualization and romanticizing “inside” knowledge as the “truth” (Cahill, 2007, p. 331).

b. Finally, we propose this model as a method for engagement working in context (or design scenario building as ‘feedforward’ or ‘orienteering’.

![Diagram](image.png)

Fig. 9. Design scenario building as ‘feed-forward’ or ‘orienteering.’

In this process, boundary objects / social objects are critical in engaging diverse stakeholders and disciplinary experts. Essentially this takes Rittel and Weber’s suggestion of open and interactive systems as the basis for understanding the social context and through the emphasis on speculation and analysis of a scenario as specific futuring, rather than constructing a single discipline’s expected analysis.
It also is dependent on speculating on tangible “objects” in the scenario (objects here can also be thought of as practices or behaviors as well). The “object” is more properly a prototype that influences how the particular scenario may play out. The qualities of the prototype are essentially the basis of a design / social intervention for future implementation.

Overview of diagram:

1. A problem or “pain point” is articulated in the community. A very proximate solution can be defined through a tangible example and how it interacts in context and can be speculated on through scenario building.

2. A second step involves the building of research inventories and designing them to be understandable and accessible to the different groups. This is provided through social science field research and archiving of local resources and practices. Design inventories are created of design typologies and practices external to local context.

3. The use of systems-oriented scenario building through consecutive frameworks of creation/production, transmission/distribution, reception and value in context, outcomes, changes and maintenance.

4. Iterative prototyping. The boundary object/prototype can be a discrete design solution, or it can be approached as a kind of “prop” or series of props as touch-points, especially in modifying behaviors and practices (educational materials can be looked at in some situations as “props” for example) or if approaching services (and service design). Boundary objects also provide a means of general discussion about methods [and methodologies] analysis of data (from social sciences) and negotiated understanding with other community members. Case studies from other locations and contexts support a borrowing approach. Resources and practices as an inventory may be unique to local communities: what local resources can be re-purposed or alternative expertise be tapped? Can the definition of an “operational part” or practice be combined with another part under the circumstances? Can things be configured using different “parts” from other sources?

5. Incremental solution finding and modification in use. This helps erode the barrier between creative production and expected final reception and prescribed use by the consumer. Community ownership of the solution finding continues the intervention. What are possible ways to refine ongoing evaluations of outcomes? As an ongoing active solution, how does the final prototype get produced, implemented and maintained? What are next steps? Is it something that can be easily modified, adapted or enlarged? Is there enough reward from it and is it satisfying to continue to support it?

IV. Conclusion

For design and sociology researchers and other partners committed to working for social change and engaging in synergies with the community, viewing design as a social science helps to frame knowledge exchanges between experts and publics and across disciplines as a performative
participatory practice involving negotiation of values, roles, and knowledges. Through integrative and situated uses of diverse methods and tools more critical perspectives and more practical applications are likely to emerge leading to social change.

This suggests a relational understanding of our role as assembling people and resources (Petrescu, 2012) to enable the mobilization of applied, experiential and diverse scholarly knowledges and methodologies toward creating prefigurative forms that suggest multiple, polyvocal, and open futures (Fry, 2011).