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Popular Participation in Climate Adaptation: An Analysis of the Civic Ecology Framework

INTRODUCTION

One of the greatest challenges facing cities in the 21st century, in the context of climate change, ecological imbalance, and economic disparity, is how to urbanize in a way that is both environmentally sustainable and socially equitable. Many cities have realized that adaptation to climate change is a necessary undertaking, and have begun the long, continuous process of assessing, retrofitting, hardening, "greening," and incorporating resiliency principles into their planning and policymaking.[1] What's less apparent is how best to encourage popular participation in the adaptation process in a way that is both meaningful and effective[2] -- collaborative and horizontal rather than top-down and expert-driven.

A concept that has emerged recently in response to these questions of scale, governance, and participation in urban climate adaptation is the EcoDistrict concept, "a neighborhood or district approach" which "offers the most likely and effective scale at which overall goals for city sustainability can be addressed."[3] EcoDistricts, as defined by the Portland Sustainability Institute (PoSI) (a pioneering proponent of the concept), are "neighborhoods or districts committed to achieving ambitious sustainability goals over time […] through the powerful combination of public policy, catalytic investments from local municipalities and utilities, private development, *and the participation of residents*[4] who are motivated to improve the quality of life and environmental health of their own communities."[5] By scaling sustainability initiatives down to the neighborhood level, EcoDistricts, in theory, provide urban residents with an unprecedented opportunity to directly steer the adaptation pathway their community takes.

Of particular interest is the separate yet related Civic Ecology framework, an approach to neighborhood sustainability that emphasizes the "software" of communities (social capital, cultural resources, participatory processes, etc.) over the "hardware" typically associated with climate adaptation (green infrastructure, energy efficiency, changes to the built

environment, and the like). EcoDistricts operating within the Civic Ecology framework, as proposed by PoSI researcher and architect Tim Smith, don't include the public in decision-making processes in a simply tokenistic way, but regard citizen leadership and ownership of sustainability initiatives as key components of equitable, democratic communities. Utilizing this framework, EcoDistricts promote urban climate adaptation while reinvigorating democratic processes and civic culture -- assets as necessary in the context of climate change as any traditional "hardware" solution.

This paper will provide a brief overview of the Civic Ecology framework and its implementation as proposed by Tim Smith and the PoSI, analyzed through the lens of the various thinkers we have discussed throughout the semester. Specifically, Arnstein's Ladder of Citizen Participation[6] will be utilized to compare popular participation in traditional adaptation processes with that outlined by Smith; community adaptation and sustainability initiatives arising from an understanding (conscientization) of climate and environmental realities will be discussed from a Freirean perspective;[7] and Civic Ecology's implementation process will be outlined within the context of Habermas's communicative rationality and discourse ethics.[8] Finally, the idealized process as laid out by Smith will be critiqued through the lens of Foucault[9] and Gaventa[10], with suggestions as to how communities might nevertheless overcome (or at least be aware of) these obstacles.

CIVIC ECOLOGY: AN OVERVIEW

In pursuing urban sustainability, city governments have tended to emphasize the "hard" over the "soft," or technological and scientific improvements managed by experts over social capital accumulation led by citizens.[11] While improved "hardware" (utilities, emissions targets, infrastructure, etc.) is certainly a desirable asset on the path to sustainability, it is only one half of the equation; too much emphasis placed on top-down efficiency initiatives, Smith warns, does little to address the underlying causes driving the sustainability crisis in the first place:

"The current paradigm," Smith writes, "suggests that achieving sustainability is primarily a technical problem. In other words, if we do the same things we are doing now, only greener and more efficiently, we will be sustainable, not have to change much, and can move on to

the next crisis […] but, better technology only helps you figure out *how* to sustain. It does not answer the more fundamental questions: *What* shall we sustain? What is *sufficient* to sustain? Who gets to decide and participate?"[12]

In building sustainable cities and communities, eliciting the broad participation of citizens and promoting civic values should take as much precedence as the successful implementation of hard efficiency measures, and this is where the Civic Ecology framework comes into play. Smith defines Civic Ecology as "the integrated web of energy, nutrient, resource, financial, information, and cultural flows and interactions that are *envisioned, created and managed by citizens*[13] acting for the common good within a geographically-defined community and its city-region. It is a human ecology of place, intimately integrating both natural and social/culture systems."[14] A district or community that cultivates and places heavy importance on its "software" -- social capital, participation, inclusivity and democratic values -- could be said to be practicing Civic Ecology.

Implementation of the framework

The outline for implementation provided by Smith consists of five steps, each predicated heavily upon citizen participation. Should a community decide to pursue sustainability through the Civic Ecology framework, the first step involves convening a representative group of stakeholders from both the public and private spheres, including government, business, non-profit, religious, and civic institutions, as well as academics and technical experts in various fields, from energy to public health. The nucleus of the EcoDistrict, this group acts as a "learning community…whose mission is to nurture the community building and systems thinking necessary for long-term intergenerational sustainable prosperity."[15] Members of the learning community also serve as ambassadors to the wider community and across scales, sharing insights with both neighborhood residents and city institutions.

In the second step, a period of investigation begins in which the learning community, with citizen input, assesses the neighborhood's existing assets: hardware and software, as well as inefficiencies and shortcomings. These community systems are analyzed for long-term sustainability and the results are again communicated to neighborhood residents at large.

Visioning, the third step, involves describing what would constitute a desirable (and attainable) future for the community, and outlining the necessary steps for moving the community in that direction. When obstacles to the vision are identified, the learning community is encouraged to invite those obstacles to a dialogue.

In the implementation phase, once near- and long-term goals have been identified by the learning community, citizens are invited to participate directly in mapping how those goals might be achieved. This is done under the guidance of the learning community (which, again, is a sort of representative citizen's committee, consisting of local stakeholders and experts) and resembles, on the surface, the sorts of community visioning workshops most city planning departments currently conduct. In this framework, however, the vision brought to the community is the direct result of citizen participation from the outset; its framers reside within the community, and it has been guided by citizen input throughout all previous phases. Once implementation plans are finalized, citizens delegate "project ownership" amongst various citizen groups and institutions, develop timelines, and identify resources. This also differs from traditional visioning in that citizen participation doesn't conclude with the workshop, but continues indefinitely; indeed, project success hinges on further participation, as it is the neighborhood citizenry who will implement and monitor the initiatives they've laid out.

"Citizens are empowered by this exercise," writes Smith, "when they realize they are applying their locally-grown expertise to the problem of designing a future. There is no technical knowledge or design skills needed to participate, only the desire to contribute."[16]

The final phase of the Civic Ecology implementation process, charting progress, is an ongoing phase that holds citizens accountable for monitoring the success of their local initiatives and altering them as necessary. In this way, as mentioned above, participation continues beyond the visioning process and is woven into the fabric of the community; sustainability becomes an ongoing civic responsibility rather than a one-time, or periodic, opportunity facilitated by paternalistic experts. Social capital is strengthened as citizens work together, and the foundations for long-term autonomy are laid as new members cycle

into the learning community and continue the ongoing process of neighborhood transformation and adaptation.

ANALYSIS

This democratic, participatory approach to community sustainability is attractive for a number of reasons, both idealistic and pragmatic. On the one hand, as Smith points out, true sustainability lies not in citizens becoming passive consumers of "greener" products and technologies, but in fundamentally altering the perception of our civic duties to our communities and to the ecosystems of which they are a part. Only through this profound, long-term transformation in our thinking can we hope to meet a future of climatic and ecological change in a way that is inclusive and meaningful.[17] The strengthening of our democratic processes and community social capital is a powerful and necessary strategy in preparing for climate change. Furthermore, by relegating planning power to the community level, cities are not only promoting public participation but potentially speeding up and improving the adaptation process; citizens are empowered to pursue those sustainability initiatives most pertinent to their neighborhood while shouldering some of the responsibility of what would be an otherwise monumental task for municipalities to accomplish on their own, that is, the city-wide transition to more sustainable modes of living.

Arnstein and participation

As mentioned earlier, many urban governments are incorporating sustainability and resiliency principles into their planning, and citizen participation is often touted as an important aspect of that process. If traditional community outreach in sustainability planning were to be judged against the criteria of Arnstein's ladder of citizen participation, however, it could often be described as a partnership at best and tokenistic at worst.

Beginning with degrees of non-participation ("Manipulation" and "Therapy"), Arnstein's ladder climbs gradually to degrees of tokenism ("Informing," "Consultation," and "Placation") and finally to degrees of citizen power ("Partnership," "Delegated Power," and "Citizen Control").[18] In the process of developing sustainability initiatives for a community, an authoritative institution (be it a city planning department, private design firm, or the like)

will typically invite community stakeholders to a visioning session in order to share their knowledge and ideas. This could be said to fall under the "Consultation" rung of the ladder and, if the community's ideas aren't later enacted or considered, would be completely tokenistic. On the other hand, a Partnership might develop between the institution and the community (where each works in tandem to enact the initiatives, for instance), giving the citizens a degree of power in the matter. In some instances, communities may receive Delegated Power to develop or implement initiatives on their own. However, as Tritter and McCallum point out[19], additional ladders exist within and between Arnstein's original rungs; delegated power to complete an inconsequential task would, unfortunately, be just tokenistic power.

The Civic Ecology approach is unique in this regard in that Citizen Control is the starting point rather than the end goal. From the outset, the endeavor towards sustainability is driven by community stakeholders rather than external third parties, and local residents inform the process from design to implementation and beyond. Of course, the learning community is technically working in Partnership with the larger city (and with other sustainably-minded neighborhoods or districts across the city); within the confines of the EcoDistrict, however, decision-making power is firmly in the hands of community members. With such an emphasis placed on ground-up, community leadership rather than top-down, expert-guided facilitation, the pitfalls of tokenism are potentially avoided and participation becomes more meaningful. The "two-dimensional" power inequities Gaventa warns of[20] are also bypassed in this way; in leading their own sustainability transformation, the community sets the agenda.

Freire, conscientization, and civic awareness

"Students," writes Freire, "as they are increasingly posed with problems relating to themselves in the world and with the world,

> will feel increasingly challenged and obliged to respond to that challenge. Because they apprehend the challenge as interrelated to other problems within a total context, not as a theoretical question, the resulting comprehension tends to be increasingly critical and thus constantly less alienated. Their response to the challenge evokes new challenges, followed

> by new understandings; and gradually the students come to regard themselves as committed."[21]

Replace “students” with “citizens,” or “learning community,” and Freire could easily be describing steps one and two of the Civic Ecology implementation process. The problem posed is how to transition to a sustainable mode of living; the total context is a future with climate change; the new challenges are those that arise as the community gains a deeper understanding, through investigation, of their economic and ecological realities; and the commitment is that which develops toward the endeavor, as the learning community becomes institutionalized and participatory decision-making becomes an integral facet of community life.

Civic Ecology’s approach to neighborhood sustainability closely aligns with Freire’s problem-posing education, in which critical thinking about an issue leads, eventually, to conscientization and therefore to autonomous solutions. The concept of the “learning community” is very Freirean in its insistence that a core group of residents take up the responsibility of a) recognizing and understanding the issues affecting the community, b) sharing their understanding of these issues with the wider community, and c) continuously engaging with the community in addressing said issues. This continuous process resembles Freire’s new teacher-student relationship under the problem-posing educational framework in which “the teacher is no longer merely the-one-who-teaches, but one who is himself taught in dialogue with the students, who in turn while being taught also teach. They become jointly responsible for a process in which all grow.”[22]

It is fitting and important that the Civic Ecology framework is so grounded in learning and critical self-reflection, because in the context of climate change the goal is ultimately not just adaptation, but transformation. A well-adapted city or community may be able to weather the hazards of a changing climate, but if there is no meaningful transformation in our thinking regarding our role as citizens of both our cities and our ecosystems, we will simply remain the passive consumers of “green stuff” Smith warns against. The transformation necessary to avoid this must begin, as Freire points out, with our conscientization as citizens.[23] This is especially true for residents of socially and environmentally vulnerable communities (who will most likely bear the brunt of climate

change[24]); by becoming cognizant of - and thinking critically about - the climate realities they are faced with, they can begin to develop autochthonous solutions. This is a process central to Civic Ecology.

Habermas and Discourse Ethics

The goal of Civic Ecology is not only the successful transition of neighborhoods to models of sustainability, but the revitalization of their civic culture and democratic processes as well[25], and in that respect the theory has much in common with the work and goals of Jürgen Habermas. The framework's implementation mirrors Habermas's call for "communicative rationality" and "discourse ethics" in decision-making, specifically in its emphasis on a) a learning community representative of the neighborhood and its myriad stakeholders (generality), b) equal representation of ideas (autonomy), c) the inclusion of "barriers" to sustainability within the conversation (ideal role taking), and d) clear statement of goals for the community and pathways to get there (transparency).[26] Just as Habermas asserts that group deliberation following these guidelines will inevitably result in a fair, rational outcome, Smith supposes that a learning community in dialogue with neighborhood residents will develop tailored, grassroots solutions to problems of sustainability.

In the process of sustainable transitions and climate adaptation, the discourse ethics laid out by Habermas address the critical issue of inclusion, which must take place if the transition is to be fair and meaningful. Asking citizens to reassess their civic responsibilities and ultimately change their lifestyles is no small thing, and so, ask Larsen and Gunnarsson-Östling, "is it legitimate to expect all people to change even if they did not feel they were represented?"[27] Smith's Civic Ecology attempts to avoid this problem by hewing closely to Habermas's principles, assuming equal representation in the community, the neutralization of power inequities, and the inevitable triumph of reason through civil discourse.

CRITIQUE

When describing the five "processual requirements" of Habermas's discourse ethics (generality, autonomy, ideal role taking, power neutrality, and transparence), Flyvberg sardonically concludes "given the implications of the first five requirements, we could add a sixth: unlimited time."[28]

The ideal space envisioned by Habermas (and Smith, for that matter) would indeed require substantial amounts of both time and patience in order to work as planned, resources that, given the realities of climate change, are essentially luxuries at this point. Given scientific projections[29] regarding greenhouse gas emissions and potential feedback loops in the climate system, mitigation and adaptation are processes that must begin immediately (should have begun long ago, in fact), and furthermore, the very concept of EcoDistricts is meant to *speed up* urban adaptation by delegating the process to the neighborhood level.

However, while adaptation and mitigation measures can be taken relatively quickly, transformation is not an overnight process, and the Portland Sustainability Institute notes that "true sustainability is not about making good decisions once, […] but about making good decisions over and over again. […] Sustainability is a product of what communities do together and how they do it over time."[30] Smith, like Habermas, is an idealist in his emphasis on rational, inclusive discourse, but given the fact that sustainability is a long-term, continuous process, and not simply a one-time cure-all, EcoDistricts have the opportunity to gradually improve the process, so long as dependence on ideal initial conditions does not stall actual progress.

As time is an issue, so too is power, and like Habermas, Smith skates past this problem by assuming that all power inequities are neutralized so long as participants adhere to the guidelines. This is convenient in theory, but is rarely the case in practice, and the Civic Ecology framework has a few glaring gaps in this regard.

Some lingering questions regarding the process are: Who convenes the learning community? Who decides which "experts" will form the community, and will those experts, once nominated, willingly participate? How will the learning community engage with the wider neighborhood after each step of the implementation process? Can the entire neighborhood be counted on to participate in these engagements? Will the learning community, consisting as it does of a wide variety of residents, be able to truly approach the task objectively? Even assuming objectivity and fairness at the neighborhood level, will the EcoDistrict be able to check power inequities when dealing with the larger city government?

And finally, in the context of a crisis as grave as climate change, is objectivity something we should necessarily be striving for?

That last question is somewhat answered by looking back to Freire and the theory of conscientization: an educated citizenry, made aware of climate change and ecological disturbance, will (one would hope) recognize these as problems worth dealing with. As to the question of who convenes the learning community, Smith and the other authors at the PoSI paint a portrait in which communities spontaneously and autonomously decide to become EcoDistricts, though in reality an organization such as the PoSI would most likely plant the seeds of the endeavor in a receptive community. Perhaps one day the idea will be so commonplace that communities do in fact opt for that route independently, but in the meantime, a power dynamic is inevitably created between the community and the (PoSI-like) organization, which must act at the outset as a sort of guiding hand in the process. If this is to be the case, then the third-party organization must be aware of this dynamic and remain as unobtrusive in the process as possible.

Yet even if the organization does so successfully, the potential for power inequities within the community itself still exists. As with any community endeavor, there are some who will be more likely to participate than others, for any of a number of reasons. This is an especially important issue to consider given the fact that, as Larsen and Gunnarsson-Östling pointed out earlier, the entire community is being asked to change, and so the entire community must become involved. Though the top-down relationship between city and neighborhood is transformed into a horizontal, collaborative relationship, care must be taken that top-down relationships don't subsequently develop within the neighborhood itself, with certain community members filling the role of "expert" and influencing the wants of the greater community.[31] Checking for and neutralizing this dynamic, should it arise, is another task the third-party organization should set for itself in the initial stages of the EcoDistrict, and for participants to be aware of as well.

Although the Civic Ecology framework as presented by Smith is very general and incredibly idealistic in its outlook, its strength lies in its generality and thus applicability to any neighborhood. By stressing community leadership and the autonomous prioritization of

community needs, it provides a flexible and participatory way of addressing the challenges of climate change and sustainability. As for the critique regarding time and ideal discourse conditions, Civic Ecology's long-term rather than quick-fix outlook provides a working guideline for communities to adhere to throughout the process; they may not get it right at the outset, but there is opportunity over the course of the endeavor to improve and strengthen it. This, in fact, is the very essence of the "adaptive urban governance" model espoused by both climate researchers and policymakers[32]: in the context of an uncertain future, new strategies must be tested in real-time and flexibility must be incorporated into decision-making. That flexibility and open-mindedness can translate over to the Civic Ecology implementation process, as well. And finally, as to the issue of power inequities, this is an unfortunate reality that participants must simply do their best to be aware of, and does not by default disqualify Smith's framework as a beneficial approach to sustainability. Just as the transformation of our communities and institutions is a goal of Civic Ecology, so too might our relations with one another transform through conscientization, and power inequities weaken as a result.

ENDNOTES

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