

SKILLS THAT DEMOCRATIC DESIGNERS WILL NEED: THE PLACE OF PARTICIPATION

HESTER, RANDY

University of California Berkeley, California, United States, rthester@frontier.com

1 ABSTRACT

Democratic design is viewed by some within the profession of landscape architecture as an important alternative to traditional design practices and an essential tool to strengthen democracy itself (Liu and Hanauer 2011). However, it is unclear what skills democratic designers will need in the future, but it is important to try to predict the necessary skills in order to develop curricula to prepare practitioners to be successful. The skills are likely to be some combination of ones historically employed by community designers, landscape architects and the people who have recently produced ecological, cultural and technological innovations in the profession (McNally, 2013). Although not easily comparable, there are studies on these three groups gathered for different purposes and at different times, but in similar enough formats to identify emerging patterns of overlap and exclusion and draw speculative conclusions.

This paper attempts to define the skills landscape architects will need to be effective in democratic design by reviewing these studies. First, the skills historically considered important for participatory design are reviewed. Second, the ideas introduced by landscape architects and environmental planners that significantly impacted society in the recent past and the skills shared by the people most responsible for those innovations are compiled (Hester, 2001; Litton et al., 1992; Hester, 1990). Third, these skills are compared to the skills listed as essential in the 2004 Landscape Architecture Body of Knowledge Study Report (ASLA Report) (ASLA, 2004). The skills shared by those who introduced the ideas that have most impacted society, the ASLA Report skills and the historic skills of community designers were analyzed and merged to create a list of skills most essential for participatory designers.

The merged skill sets include the following: 1. Core skills in design/planning, 2. Participatory design theory, group processes and techniques for collaborative design, 3. Political organizing, empowerment and changing power structures, 4. The functions of community as people, place and ecosystem, 5. Environmental justice, need-based

programs, micro social patterns and macro trends, 6. Development of a vision for society, courage of convictions and civic ambition and 7. Mastery of multiple disciplines, employing oppositions to maximize outcomes. This paper discusses the seven skills relative to the skills called for in the ASLA 2004 Study Report, those of participatory designers and those of innovators. In the context of debates about design versus participation, it suggests ways to learn important skills missing from present curricula. The paper concludes with suggestions about how to proceed from these speculative conclusions to better define the skills that democratic designers will need.

1.1 Keywords

democratic design, improving community participation, essential skills

2 CONTEXT

Since Karl Linn and Larry Halprin along with dozens of youthful 1960s idealists introduced participatory processes to landscape architecture, community design and collective creativity have been parts of professional debate. Clearly not mainstream these democratic approaches have often been marginalized and remain somewhat ill-defined (Cooper Marcus, 2013). Within the academy democratic design may be a teaching tool, service-learning or advocacy intervention. Democratic design is variously referred to as community, participatory, transactive or collaborative design. It may focus on environmental injustices related to race, poverty and marginality or broader challenges of democratic societies. This paper embraces both foci, best described as democratic design, an umbrella for multiple approaches that are participatory, transparent, justice seeking and concerned with the form and reform of community and democracy.

In recent years democratic design has achieved privileged status within landscape architectural research producing significant advances in theory (Stokols, 2011; Hester and Chang, 1999) and practice (Angotti et al., 2011; McNally, 2011; Chanse, 2011). There is evidence of distinct approaches (Liu, 2005; Palermo, 2000;

Hester, 1985; Halprin, 1969), nuanced methods (Doble and King, 2011; Organization of Urban Res., 2005) and cultural trends in American society and emerging democracies (Hester, 2012; Hou, 2010). Still within academia there remains tension between participation and design excellence (Hester, 2005; Halprin, 1999). This is partly a quandary over what skills landscape architects will need and which educational priorities should dominate and partly the continuing question about the roles of professionals regarding laypeople in a democratic society (Bowring, 2012; Treib, 2008; Liu, 2005). And there remains the largely unspoken question of what skills community designers lack that would enable them to more effectively transform communities and society. So what skills will be most needed to do participatory design in the future? The paper answers this in a preliminary way that likely will provoke serious discussion among the many academics and few practitioners who are attempting to articulate the skills the next generation will require to advance democratic design.

3 SKILLS HISTORICALLY ASSOCIATED WITH PARTICIPATORY DESIGN

As a historic benchmark regarding the skills needed for doing participatory design, the 1990 study of community designers was used. The analysis of their responses to an open-ended query "What do you perceive to be the essential skills of a community designer?" revealed extraordinary agreement on four factors (Hester, 1990). 73 percent of the respondents listed group process skills to get people to work together to solve problems creatively. 70 percent listed political organizing; 50 percent listed assessing and manipulating the power structure to address environmental inequities. 47 percent listed traditional design skills. There was significant agreement on other skills as well. 40 percent listed communication between designer and users; 37 percent, financial resourcefulness; 35 percent, use of questionnaires and interviews; 33 percent, translating cultural factors into design form; 30 percent, listening; and 27 percent, two way teaching and learning.

4 SKILLS THE STUDY REPORT EXPECTS LANDSCAPE ARCHITECTS TO MASTER

The 2004 Landscape Architecture Body of Knowledge Study Report (ASLA Report) provided a benchmark of the skills considered most important for the practice of landscape architecture. The

respondents, "individuals known to be thoughtful contributors" in education and practice, agreed on four core competencies. These included 1. Analyze relationships among design elements by determining opportunities and constraints, 2. Develop conceptual design, planning and management solutions, 3. Evaluate design alternatives to determine an appropriate solution and 4. Maintain and support professional ethical standards. Then the report describes skills that about half of the respondents felt had to be mastered in the first professional degree including land information sources, natural site conditions, creativity and process including design theory, aesthetic principles of design, accessibility regulations, elements of vehicular and pedestrian circulation, grading, drainage and storm water management and graphic presentation.

Next there are skills for professional practice about which there is little agreement among landscape architects known to be thoughtful contributors. Here is the first mention in the ASLA 2004 Study Report of skills distinctively associated with participatory design. 18 percent of the respondents considered it important to master social and cultural influences on design or design needs of special populations; by comparison, 33 percent of community designers ranked a similar skill as essential. In a post professional context, seven (7) percent of the ASLA Report respondents considered determining users' values through such things as focus groups and surveys as important (ASLA, 2004). This compares to 73 percent of participatory designers who listed group process skills as important and 35 percent of community designers who listed use of questionnaires and interviews as important skills, in response to an open ended question (Hester, 1990).

Caution should be exercised in comparing the results of these two surveys beyond priorities at a general level. But it seems reasonable to conclude that there is agreement between thoughtful landscape architects and participatory designers about the importance of core design skills, and little else. The differences pointed out above are striking. Most notable is the lack of attention that landscape architects are expected to pay to political organizing and redistributing power compared to the highest priorities of community designers. As has been pointed out elsewhere, this unconcern can be explained most simply because landscape architects generally are dependent upon and benefit financially from relationships with clients whose vested interest is the political status quo. It is in this context that Philip Johnson, in describing designers, acknowledged, "We are all

whores”, who sell services, talents or names for less than worthy purposes (Hester, 1975).

5 MOST IMPORTANT IDEAS IN RECENT PAST

This phase of the research included an analysis of literature in landscape architecture and environmental planning completed for a related project to determine what have been the essential ideas landscape architects and environmental planners introduced in the recent past that advanced humanity (Litton et al., 1992). The study considered ideas from the last half of the previous century. Each of the ideas enjoyed an extended period of coverage in *Landscape Architecture Magazine*; most were subject of critical discussion in *Landscape Journal*. These are summarized along with key innovators for each idea.

1. Landscape architecture serves not only private but also corporate interests extremely well and profitably, especially in the efficient and gracious use of space and in expressions of power and identity. Garrett Eckbo and Hideo Sasaki exemplify this innovation; both created firms capable of delivering exceptional design at scales, refinement and complexity to meet the needs of local, national and international governments and corporations.
2. Landscape architects can deliberately apply ecological theory and principles to land use planning and site design to create more resilient cities and regions. This idea was crafted most clearly by Ian McHarg and reformed for urbanity by Anne Spirn. Michael Hough demonstrated how to apply the theory and principles to city scale design. Joan Nassauer showed how to interject this thinking into contentious politics at regional scales. Richard Forman acknowledged the importance of translating ecological theory into design guidelines and joined landscape architects in an effort to merge science with landscape practice (Hough, 1984).
3. Society's very fabric depends on designing and making community and creating environmentally just communities (Gans, 1968). Dr. Martin Luther King, Jr. awakened the nation to the idea that city form from Urban Renewal and Negro Removal to school facilities, bus routes and city freeways through Black neighborhoods could destroy or enhance community and justice. Paul Davidoff responded with a new way to plan, advocacy. Karl Linn showed the role landscape architects could play in creating community and environmental justice through Neighborhood Commons. Others followed Linn's lead to create what is now called service-learning. John K.C. Liu and Chao Yu perfected this approach in California and more recently in Taiwan and China (Davidoff, 1965).
4. Experiencing wild and cultured nature is essential to health, healing, place attachment, memory, emotional growth and design inspiration. Nature is the most authoritative power for the profession of landscape architecture and environmental planning. Although this had long made intuitive sense to many people inside and outside the profession, only in recent years did systematic research “prove” the various claims about the power of the experience of nature. Geographers and environmental psychologists and later medical professionals recognized the importance of working collaboratively with landscape architecture academics. J.B. Jackson, Ted Relph, Yi-Fu Tuan, Rachel and Steven Kaplan, among others, made direct connections to landscape architecture. Roger Ulrich's work offered empirical medical evidence regarding the relationship between health and nature. Larry Halprin showed how to create powerful places of constructed nature in the city parallel to the advancing research (Relph, 1976).
5. In all these endeavors design matters. Mid-century corporate design was challenged by approaches that stressed ecological, urban, socially concerned and/or participatory design. These approaches produced what high-style and more art-oriented designers considered unsatisfactory projects. Although it remains unclear if this was primarily a matter of subjective and elitist judgments, some important professionals felt that design was being short-changed, even neglected by the approaches that addressed public issues beyond private gardens and corporate interests. Michael Van Valkenburgh represented a new generation trained to consider broad public concerns but still primarily interested in landscape design as an art. He organized an exhibition, *Transforming the American Garden: 12 New Garden Designs*, that announced that design was going to make a comeback. Throughout this time, Larry Halprin proved over and over that skilled professionals could produce the most innovative landscape architecture of the era and address important public issues. Their practices exemplify the elegant resolution of site design and some of the pressing public issues of their times. It is clear that design

matters in addressing critical public problems; it is less clear that design aesthetics that appeal to professional tastes is essential to the public good.

6. Landscape architecture must develop its own technology and approaches to infrastructure, not just rely on engineers and others to produce technology that professionals borrow. Some professionals realized that borrowing indiscriminately from others undermines professional intentions with techniques counter to landscape goals. Jack Dangermond has made the strongest, most publicized case for this. People like Linda Jewell, Bruce Ferguson, Mark Francis and Len Hooper have also advanced technology expressly oriented to landscape architecture (Francis, 2003).
7. The needs of different users are not exactly the same. Wants and needs vary by social class, race, life-cycle stage, home ownership, region, national origin, length of residency and many other factors (Hester, 1975). This requires that designers and planners pay attention to universal and idiosyncratic needs. Users are a source of native wisdom and inspiration, but most designers are not skilled in ways to understand the unique needs or potential inspiration. Herbert Gans, William Whyte, Mark Francis, Robin Moore, Chao Yu, Henry Sanoff, John K. C. Liu and many others have contributed techniques to enable designers to discover and utilize the distinctive needs of different populations. EDRA, and to a lesser extent CELA, attended to the research required to address this issue. Charles Fountain created a program in a historically Black university. Clare Cooper Marcus exemplifies this "discovery" of the different needs of different people. She develops guidelines for designers (Cooper, 1975; Cooper Marcus, 1995).
8. Whereas corporate design undermines deep democracy, participatory design, even done poorly, cultivates informed and responsible democracy. The more skillfully and inventively it is done, the better the outcomes, including the form of democratic places. Larry Halprin and Karl Linn introduced different ways to do participatory design for distinctly different purposes. Daniel Iacofano demonstrates how readily participation produces multiple public benefits (Iacofano, 2001; Halprin, 1969).
9. Power over landscape decisions is increasingly globally networked, and these networks can centralize power in placeless economies that enhance only the "one percent" and/or decentralize knowledge and professional skills

to serve place-based economies that distribute wealth among the other 99 percent. This requires a global perspective. Frances Moore Lappe and publications like Justice Rising advocate amendments that would disallow corporate personhood and abolish other barriers to place-based economies. Among designers, Jeff Hou demonstrates mastery in design as a global endeavor to create landscape-based economies (Lappe, 2010).

10. Public serving practice follows infrastructure investment whether in parks, wildlife corridors and preserves, rails to trails, housing, freeways or light rail, parking or anti-parking, antiterrorism or war, flood control or climate change mitigation. Retrofitting infrastructure with multiple purposes can create new economies and more resilient, elastic regions, if the designer has and inspires a vision beyond the immediate situation. Robert Moses showed how to do this with brute power. Joe Edmiston and Rosey Jencks demonstrate more public serving innovations at regional and city scales. Through Rebar and Parking Day John Bela and Blaine Merker inspire with grass-roots actions that become international in scope (McNally, 2011).

6 COMMON CHARACTERISTICS OF INNOVATORS

In the next phase of this research, the author identified the characteristic skills shared by the people who introduced these ten essential ideas by considering the skills in the ASLA Report and then adding distinctive skills of the people who introduced the essential ideas. The assumption was that many of the skills needed for landscape architects to significantly contribute ideas that would serve or advance humanity in the near future would be found in the characteristics that distinguished the people with the most innovative and important ideas in the recent past. The issues were not expected to be the same in the future, but common skills might be. These skills could then be compared to the 1990 report on participatory designers and the Body of Knowledge presently articulated in the ASLA Report describing the core skills for landscape architecture education and practice. With the exception of seven people the author knew the innovators well enough to make a preliminary evaluation about each skill. If 80 percent of the innovators the author knew well possessed a skill, that skill made the list that follows. The skills were arranged into three categories: 1. ones shared with the list of most important competencies in the ASLA Report, 2.

ones not listed in ASLA Report but consistent with professional behavior, and 3. qualities that distinguish the innovators' skills from the skills described in the ASLA Report. Comparisons are also made to the skills historically associated with participatory design.

7 COMPARING SKILLS

The first category is the skills shared by innovators and ASLA Report respondents. The innovators who introduced the essential ideas had mastered the four core competencies of landscape architecture listed in the ASLA Report and which participatory designers also considered essential. They all knew how to 1. analyze relationships among elements determining opportunities and constraints, 2. develop conceptual design, planning and management solutions, 3. evaluate alternatives to determine an appropriate solution and 4. support ethical standards. They had mastered both scientific and intuitive methods and possessed common and uncommon sense associated with creativity. Many valued native or local wisdom as well as scientific knowledge. They could conduct extensive research and analysis, but when the time came they were able to act on the basis of incomplete information. They could articulate and effectively communicate their ideas in both drawing and words. Most learned these skills in professional programs of landscape architecture and practice, but some learned them in a related field or from working with landscape architects. Two thirds of the people who introduced essential ideas knew how to design with topography and could do grading and drainage as well as planting plans and construction documents. Like many landscape architects they had also mastered several fields and knew what they did not know but knew where to find it. This is similar, although more encompassing, to the expectation that the first professional degree prepares one to utilize multiple land information sources. And, like most landscape architects and community designers, those who introduced essential ideas got immense daily pleasure in what they did.

The findings that create the second category contrast the characteristics of the innovators, the ASLA Report and the skills of participatory designers. The ASLA Report is narrowly focused and inconsistent with skills of innovators. For example only six percent of participants in the ASLA Report considered attention to emerging trends and issues as an important skill to learn, even in post professional study. In contrast all of the innovators and community designers understood the importance of

the landscape and connected that understanding to a big emerging cultural issue. Similarly all of those who introduced essential ideas and participatory designers possessed a strong and broad personal vision about how the world should be, but community designers often focused primarily on injustices and immediate user desires. Like innovators they paid attention to detail. They also combined ideas from multiple unrelated fields and applied those ideas as an integrated whole to the design, planning and/or management of the landscape. And they seldom whined even in the face of adversity and failure.

There are a number of skills that nearly all of the people who introduced essential ideas possess that many landscape architects possess in part that are not addressed in the ASLA Report. The innovators were expert in social and/or ecological systems and over half were expert in both. In contrast, 27 % of respondents in the ASLA Report considered it important to master ecological planning principles and 18% considered mastery of social and cultural influences on design important in professional practice. Participatory designers historically paid greater attention to social factors and less to ecological factors. All of the innovators had the ability to work effectively both alone and with others in contrast to the ASLA Report which stresses primarily personal technical training; only 18 % in the ASLA Report considered consensus and team building essential and, only as a specialized topic post professionally. Participatory designers depend disproportionately on group problem solving compared to others. It is reasonable to conclude that community designers will be more effective if they develop better skills in critical analysis, independent thinking, and synthesis external to group process.

The third category consists of clusters of distinctive skills of innovators missing entirely in the ASLA Report. These may be named, with some over-simplification, Personal and Political Courage, Grounded Boundlessness and User/Provider Collaboration.

8 PERSONAL AND POLITICAL COURAGE

The first cluster includes personal and political courage of conviction regarding the idea. To incubate and see an idea that truly serves humankind to fruition required (in addition to the above skills) taking a big risk, working harder at the idea than most people worked, being self-critical about the idea and sticking with the idea when it was unfashionable and indefensibly formed. Innovators in landscape architecture could accept

ostracism and were reasonably immune to immediate external gratification. Meaningful contributions resulted from digging deeply, never superficially. Interestingly, innovators, while passionate about their ideas, were able to disengage and abstract it from time to time, often even playfully. They could do this even though their identities were tied to their missions. As the idea took shape, the innovators were savvy in political arenas appropriate to the ideas. Most utilized a full range of political approaches and tactics from education and cooperation to conflict and civil disobedience. In contrast to shrinking violets, often used to characterize landscape architects, the people who introduced essential ideas were rather like Venus Fly Traps. Like innovators, community designers generally exhibit personal and political courage. In the 1990 study 50 percent of the community designer described themselves as having a strong commitment to their principles, but there is little data regarding how they compare with innovators regarding the associated subcategories listed above.

9 GROUNDED BOUNDLESSNESS

Different than the depictions of landscape architects and participatory designers, innovators were simultaneously solidly grounded and intellectually boundless. They possessed a rare combination of confidence in their core fields and compulsion to connect to other alien fields. They knew that solutions to pressing problems lie outside or at junctions of, not inside, specialized fields and were willing to range far beyond landscape architecture. They more easily crossed disciplinary boundaries than most people. They were able to hold multiple, often competing or even mutually exclusive, ideas in their minds at once; eventually they harnessed these conflicting ideas and maximized the strengths of each opposition as a whole, a unity. In contrast to landscape architects who focus on either small scale design or large scale planning, they worked at multiple scales from site to region and beyond, making small scale projects bigger and big scale projects smaller, in order to understand the appropriate roles of both policy and site design interventions.

10 USER/PROVIDER COLLABORATION

Although the idea likely originated in some subconscious passion and a rigorous search across disciplines, each of the people who introduced an essential idea diagnosed and solved a problem accurately by considering the issue from the points of view of both the service providers and

the users. They did this through direct participation with or research about the provider and user. They answered the critical questions of “what does the designer need to know that the users already know?” and “what do the users need to know that the designer already knows?” Often this inquiry led to a discovery itself and, in almost all cases, enabled the innovator to implement the discovery. Successful implementation depended upon the development of a precise technology suitable for widespread use and poetic enough to enable providers and users to communicate effectively. This made some invisible problem, and often some invisible professional innovation, visible and explained exactly how to go about solving it. Often this was done through a publication like McHarg’s *Design with Nature*, Halprin’s *RSVP Cycles* or Francis’ *Case Study Method*. In other cases short courses trained providers and users to work collaboratively, expanding the knowledge of both. This required convincing providers and users that the problem was serious, that this approach could address it and that working collaboratively would increase the success rate. Also the innovator had to provide a common language and methods to enable collaborative work. This is strikingly like the approach Friedmann (1973) outlined in his theory of transactive planning. Historically this cluster of skills has been among the essential skills of the most successful participatory designers, but it is unclear if these skills are taught or practiced in the diagnostic manner of the innovators.

11 SEVEN ESSENTIAL SKILLS

For participatory designers to be effective in the future their roles, like those who introduced essential ideas in the past, must be meaningful to society in the context of the big challenges society faces; therefore, they will likely need skills unique to those innovators. In addition they will need core skills of landscape architects. And they will need skills particular to the practice of community design. Merging critical capacities from each provides one possible set of skills for the future: 1. Core skills in design/planning, 2. Participatory design theory and group processes and techniques for collaborative design, 3. Political organizing, empowerment and changing power structures, 4. The functions of community as people, place and ecosystem, 5. Environmental justice, need-based programs, micro social patterns and macro trends, 6. Development of a vision for society, courage of convictions and civic ambition and 7. Mastery of multiple disciplines, employing oppositions to maximize outcomes. These skills would empower participatory designers to address real problems

not be decorators, to lead, to develop solutions at site, regional, policy and legislative scales and to demonstrate how to joyfully dwell while coping with overwhelming challenges.

Considering the seven skills above, most professionals educated in landscape architecture and environmental planning can be expected to master the first but to have little experience in the others. Although students focused on participatory design gain a rudimentary knowledge of the other skills if they take courses in social factors, city planning and service-learning, they likely need extensive practice in the three clusters of skills noted above: Personal and Political Courage, Grounded Boundlessness and User/provider Collaboration. How can these skills be better developed? Here the author will speculate on techniques that might be useful (and playful) ways to gain skills that seem missing in present academic curricula. These come from creative sources mostly outside the landscape profession. If you are offended by them, notify the author or propose your own.

12 GAMES TO DEVELOP COURAGE OF CONVICTION

The landscape architecture profession has been described as caring, passive, nurturing, conflict averse and largely politically naïve and ineffective (Cooper Marcus, 2013; Cranz, 1992; Saegert, 1980). Community designers and the people in the profession who introduced the essential ideas that served society in the recent past possessed additional qualities. They understood civic responsibility. Many of them exhibited not only caring but also public courage. Not all of the innovators engaged public debate directly, but more than half did. Almost all experienced conflict with some public or academic group. Developing and implementing ideas to meet big challenges changes public action that generates controversy. This requires taking big risks in the public realm, unusual courage of conviction and political savvy. Effective use of power interpersonally and in the public arena is one key to successful political intervention. Political savvy derives from understanding power systems and a willingness to use the full range of political tactics from collaboration and facilitation to conflict generation and resolution and civil disobedience. Many landscape architects and community designers rely excessively on accommodation to avoid disagreement (Forester, 1988; Alinsky, 1971).

How does one unlearn constant conflict avoidance and learn how to exercise power

effectively, fairly and in caring and healthy ways? This cluster of skills requires practice just like designing a park, grading a site, learning plants suitable to a region or running the marathon. If landscape architects are to be effective in addressing big challenges, they need to begin early in life to practice the exercise of power in the public domain. Old-fashioned debate societies, product boycotts, Student Council, civics classes and Chamber of Commerce leadership courses provide basic training in civic leadership.

To overcome the fear of conflict Eleanor Roosevelt urged everyone to “Do one thing every day that scares you.” James Scott (2012) is more explicit. He suggests doing a set of daily calisthenics to prepare oneself for big stakes political struggle. Scott argues that without daily practice in small conflicts, one will wilt in the face of significant opposition. He chose jay walking as a safe way to practice civil disobedience, and even that was not easy. Variations including experiential sustainability games, attack on privilege, exclusion, conflict role play, fantasy power pushups and participation with a view might train landscape architects who want to effectively practice community design with the discipline of the Marines, the physical strength of rock climbers, the inner strength of Yoda, the political will of Robert Moses and the political vision of Dr. King.

A course in participatory design could easily incorporate such skills in productive conflict as well as cooperation. Students could learn to be more fully engaged in volatile political field work situations riddled with conflict. During the budget debates about reducing spending on California higher education Marcia McNally helped students make piggy banks and organize the piggy-bank protest during which they intercepted officials at public meetings and begged for pennies or loose change for higher education. Their protest was carried to the Legislature in Sacramento. For many students this was the first assertive public political action they had taken, and it was scary. It also was good practice (Green, 2010). Participatory theory is most effective when combined with the experience of conflict.

Courses in environmental policy and law provide essential background. Professional practice courses might focus on civics, public procedures and leadership from Robert’s Rules of Order and Alinsky to working with agencies and creating non-governmental organizations. Among the readings, Frances Moore Lappe’s *Liberation Ecology* and *Getting a Grip 2* (Lappe, 2010; 2009) might be required to put personal action in its larger context. Mapping power should be a step in every

design project (Hester, 2006). It might also help at liberal universities to make the structure of landscape architecture and environmental planning curricula clear, rigid and distinct enough that students can rebel against it and develop personal manifestoes that require real courage to articulate and act upon.

13 PRACTICING GROUNDED BOUNDLESSNESS

The people who introduced essential ideas were grounded in core skills but knew that solutions to meaningful problems lie outside or at junctions not inside specialized fields. They combined ideas from multiple unrelated disciplines. They worked at multiple scales, harnessed opposing mutually exclusive forces and maximized each in a single unified concept. Again practice is required to master this capacity.

One way to achieve this is to organize education in landscape architecture and environmental planning around Systems Theory and sampling. This builds on the claim that landscape architects are most effective as generalists but with specific core skills. An essential first step is to overcome the schism between landscape architecture and environmental planning. The former may be governed by aesthetics and the later by ethics, but they are indistinguishable in the societal context. To produce effective professionals they should share a common curriculum requiring topography, grading, drainage and environmental law and policy. This would also serve to dispel the misperception that participatory design is limited to small projects. Participation depends upon the type of government, not scale. Participatory designers prefer democracy, including the right and responsibility of citizens to engage in making the public sphere. Some landscape architects prefer a technocracy, unchallenged by citizens or democratic process; most benefit from **a corporatocracy that pays well at ecological and cultural expense. In a democracy, scale is not the limiting variable.** Transactive design mastery is. Mastery requires dedicated practice, and landscape architects usually start at the small park or garden scale before implementing larger commissions. Participatory design is no different in this regard (Palermo, 2000).

Malcolm Gladwell (2008) concludes that it requires 10,000 hours of practice to master something. It is reasonable then to expect mastery of basic core skills plus three or four other fields of expertise by graduation with a first professional degree. Candidates for degrees might demonstrate

by exam this multi-mastery and how each of the three or four areas as a whole will address one of society's big challenges at multiple scales, using native and scientific approaches. The value of this is presently expressed by three year graduate programs where at least two distinct fields will be mastered and by dual degree programs with city planning and architecture. To accomplish the goal of dealing with irreconcilable oppositions requires dual degrees in far more diverse disciplines like medicine, statistics, real estate economics, law and anthropology.

Applying Gladwell's outlier calculation to a professional career, continuing education would enable the mastery of at least 25 more distinct capabilities. To achieve this all landscape architects must learn how to teach scientists and citizens to work with them. The goal would be to become a Jack or Jill-of-all-trades and a master of 30.

The curriculum could introduce this way of imagining grounded boundlessness by teaching juggling with different objects to practice handling oppositions. The foundational idea is that the next generation prides its ability to multi-task; they can text, eat, sleep and take notes in class simultaneously, so they should be able to learn multiple skills and address conflicting topics at once. For example hand graphics and computer spatial analysis could be taught as one class. Plant identification and participatory techniques could be taught as another. At Chung Yuan Christian University (CYCU) Big Tree Classroom teaches landscape architecture freshmen site design, social/ecological factors and community participation simultaneously. Students then consider these a whole system from the beginning and do not perceive these as opposing or segmented forces. CYCU freshmen learn theory and application of ecological and cultural community first hand from living in an Aboriginal village whose culture establishes status from rat to bear hunting. An internship in farming, forestry or fishing might similarly teach hands-on systems thinking.

14 USER AND PROVIDER TRANSACTIONS

What is participation anyway? The people who introduced essential ideas possessed participatory skills but employed them differently than participatory designers. Each diagnosed a problem by considering the service provider and the end user through direct participation and/or research. Then they developed technology suitable for widespread use, trained professionals and users to work collaboratively expanding the knowledge of

both and creating much better informed results. The need for direct communication between the landscape professional and users parallels an emerging awareness in medicine of the importance of making the black box of professional skills transparent and improving professional–user communication for better problem solving. Intermountain Health is a leader in this movement, concluding that they save \$250 million per year and 1000 lives through an intensive transparent collaboration between doctors and patients. At Dalhousie University a new medical curriculum includes a Critical Thinking Program that exposes 50 biases of doctors that lead to incorrect diagnoses. Then they train doctors to 1.Listen better to patients and 2.Teach patients enough language that they become partners in solving their problems. This collaborative skill is central to the future of medical curricula and may need to be required in the core of any professional education that hopes to address important challenges in the future (Landro, 2013). Those who teach participatory design may find instruction in the approach the innovators employed and may need to rethink which participatory skills are most important and how to develop and improve them.

15 CONCLUDING THOUGHTS: LIMITS AND NEXT STEPS

I set out to understand what skills young landscape architects will need to be effective in democratic design as it is evolving. I know many of the skills required fifty years ago are still essential, but some have been superseded, and new ones are emerging to address changing needs. I used what information regarding skills that I could find. What I found could be compared, culled and synthesized but only with creative interpretation. The “data” did not lend itself to reduction. It required comparing apples and oranges as one insightful reviewer pointed out. I would add a third, paw paws. Each was picked up and put in a basket.

Through the effort I discovered seven essential skills. And I offered suggestions as to how some of those skills might be learned: the challenge of “teaching” courage, reconciling paradoxes of specialization and collaborative boundlessness and learning from other professions that more recently than landscape architecture have discovered value in participatory action. In retrospect I acknowledge that my concern for the future of democratic design and my curiosity about skills combined with the various unrelated resources and my method of integrating them creates a disjointed argument. The urgency of this subject required “risky” research to initiate a more inclusive discussion and possibly

more conventional research by others in the future. One reviewer suggested “a more systematic manner of research, e.g., surveys, interviews, focus groups etc.” That reviewer went on to urge that academics and professionals should place skills in the context of philosophical and theoretical frameworks in which democratic design is grounded. I agree.

Undertaking systematic research begs for a collaboration of young scholars combining social science skills and community design practice with ethical and theoretical thinking. I hope this paper inspires this research.

The question of essential skills needs to be debated and thoughtfully processed in a participatory process, possibly through focus groups, possibly through a Delphi probe. Others are organizing such efforts in the ASLA, CELA, the Democratic Designers in the Pacific Rim and EDRA. This paper may contribute one framework for these critical discussions. Participatory design will continue to distinguish democratic societies, but, to thrive, both democracy and participatory design will have to reverse corporate control of the political process, compensate for their shortcomings and strengthen their own capacities. This requires combining skills in landscape design and planning, traditional skills of community design and distinctive skills of innovators.

16 REFERENCES

- Alinsky, S. (1971). *Rules for Radicals*. New York: Random House.
- American Society of Landscape Architects (2004). *Landscape Architecture Body of Knowledge Study Report*. Washington: ASLA.
- Angotti, T., Doble, C., & Horrigan, P. (2011). *Service Learning in Design and Planning*. Oakland: New Village Press.
- Appleyard, D. (1981). *Livable Streets*. Berkeley: University of California Press.
- Bowring, J. (2012). Ethics/Aesthetics. *Landscape Journal* 31(1-2), 227-228.
- Chanse, V. (2011). context and complexities. *Landscape Journal* 30(1), 121-132.
- Cooper, C. (1975). *Easter Hill Village*. New York: Free Press.
- Cooper, C. (1995). *House as Mirror of Self*. Berkeley: Conari Press.
- Cooper, C. (2013). Women are supposed to know that stuff. In W. Lowell et al. (Eds.), *Landscape at Berkeley* (p.100-108). Berkeley: University of California.
- Cranz, G. (1992). *The Politics of Park Design*. Cambridge: MIT Press.

- Davidoff, P. (1965). Advocacy and pluralism in planning. *Journal of the American Institute of Planners* 31(4), 331-338.
- Doble, C., & King, M. (2011). plural planning at multiple scales. *Landscape Journal* 30(1), 72-87.
- Forester, J. (1988). *Planning in the Face of Power*.
Berkeley: University of California.
- Francis, M. (2003). *Urban Open Spaces: Designing for User Needs*. Covelo: Island Press.
- Friedmann, J. (1973). *Retracking America*. Garden City: Anchor.
- Gans, H. (1968). *People and Plans*. New York: Basic Books.
- Gladwell, M. (2008). *Outliers: The Story of Success*. New York: Little Brown.
- Green, J. (2010). The dirt: uniting the built and natural environments. Retrieved from:
<http://dirt.asla.org/2010/09/07/asla-2010-student-awards-announced>.
- Halprin, L. (1969). *The RSVP Cycles*. New York: Brazille.
- Hester, R. (1975). *Neighborhood Apace*. Stroudsburg: Dowden, Hutchinson & Ross.
- Hester, R. (1985). Landstyles and lifescapes: 12 steps to community development. *Landscape Architecture* 75(1), 78-85.
- Hester, R. (1990). *Community Design Primer*.
Mendocino: Ridge Times Press.
- Hester, R. (1999). Interview. *Places*, 12(2), 42-51.
- Hester, R. (2001). What makes participation exemplary? *Places* 14(1), 34-37.
- Hester, R. (2005). Whose politics do you style?
Landscape Architecture 95(12), 72-79.
- Hester, R. (2006). *Design for Ecological Democracy*. Cambridge: MIT Press.
- Hester, R. (2012). What color is democracy in the United States? In K. Zoh et al (Eds.), *Green Community Design* (p.15-23). Seoul: Seoul National University.
- Hester, R., & Chang, S. (1999). *A Theory for Building Community*. Taipei: Yungliou.
- Hough, M. (1984). *City Form and Natural Process*.
New York: Van Nostrand Reinhold.
- Hou, J. (Ed.) (2010). *Insurgent Space*. Oxon: Routledge.
- Iacofano, D. (2001). *Meeting of the Minds*.
Berkeley: MIG Communications.
- Irazibal, C. (Ed.) (2008). *Ordinary Places, Extraordinary Events: Citizenship, Democracy, and Public Space in Latin America*, London: Routledge.
- Landro, L. (2013). The biggest mistake doctors make. *Wall Street Journal* 11/18/2013, pr2.
- Lappe, F. M. (2009). *Liberation Ecology*.
Cambridge: Small Planet Media.
- Lappe, F. M. (2010). *Getting a grip 2*. Cambridge: Small Planet Media.
- Linn, K. (2008). *Building Commons and Community*. Oakland: New Village Press.
- Linn, K. (1968). Neighborhood commons, *Architectural Design*, 382.
- Litton, R. B. et al. (1992). Most important questions.
Landscape Journal 11(2), 160-181.
- Liu, E. & Hanauer, N. (2011). *The Gardens of Democracy: A New American Story of Citizenship, the Economy, and the Role of Government*. Seattle: Sasquatch Books.
- Liu, K. C. (2005). When professional knowledge meets local wisdom. In J. Hou, M. Francis & N. Brightbill (Eds.), *Reconstructing Communities* (p.41-46). Davis: Center for Design Research.
- McNally, M. (2011). Nature big and small.
Landscape Journal 30(1), 19-34.
- McNally, M. (2013). Training to change the world. In W. Lowell et al (Eds.), *Landscape at Berkeley* (p.109-116). Berkeley: University of California.
- Organization of Urban Re's (Ed.) (2005). *International Community Planning Forum*. Taipei: OURS.
- Palermo, F. (2000). *First Nations Community Planning Model*. Halifax: Dalhousie University.
- Relph, E. C. (1976). *Place and Placelessness*.
London: Pion.
- Saegert, S. (1980). Masculine cities and feminine suburbs: Polarized ideas, contradictory realities.

- Signs: Journal of Women in Culture and Society* 5(3), S96-S111.
- Sandercock, L. (Ed.) (1998). *Making the invisible visible: A Multicultural Planning History*. Berkeley: University of California Press.
- Sanoff, H. (2000). *Community Participation in Design and Planning*. Hoboken: John Wiley and Sons.
- Scott, J. C. (2012). *Two Cheers for Anarchism*. Princeton: Princeton University Press.
- Stokols, D. (2011). Forward. *Landscape Journal* 30(1), 1-5.
- Treib, M. (Ed.) (2008). *Representing Landscape Architecture*. London: Taylor and Francis.