

Complexity and Engagement: Art and Design in the Post industrial

Frances Whitehead and Christine Atha

In late summer 2010, Chicago artist Frances Whitehead invited School of the Art Institute of Chicago (SAIC) colleague Christine Atha to join her for a conversation about recent projects and shared interests. A dialogue unfolded concerning forces driving artists and designers to rethink their practice, and innovative ideas about creative practice, community and the future.

Why Design?

FW: Some of the complexity of the modern world comes from confusion between how things unfold in time and space, temporally, and in the future. We know from polls and surveys on climate change that most people have difficulty comprehending events temporally.¹ The inadequate accounting for the temporal dimension-- the aging of infrastructure and the impacts of industrialization that have mounted up-- these things were never part of a future that was intended, never envisioned 'by design'. But these are key features of the condition of the **post-industrial** that is so widespread in the developed world, and from which has sprung doubts about the mission of many disciplines, including art AND design. Some evidence of this kind of 'doubt' is the large number of people who seem to be **restless in art and design**. Art, which has in the last century, seen itself as a largely autonomous practice, is only recently examining the merits of engaging the long-term future. Design, it seems, cannot fully imagine what the future impacts will be. We see designers who are essentially making art and artists like myself who appear to be doing design. So, whatever this restlessness is, we can see within these disciplines a spirit of redirection, redirecting the *habitus*² of these professions. This is restructuring the landscape of creative professions and for practitioners interested in theorizing the leading edge of their disciplines, interested in dealing with the mounting pressures of the post-industrial, these questions have to be answered.

CA: Contemporary design practitioners are thinking very deeply about the consequences of post-industrial design, and what is going to happen as a result of their decisions. When we saw the first explosion of plastics into consumer culture, in the middle part of the last century, we knew we had a problem. We could see that consumer goods were going to go in a difficult direction, and as a result of that, we have now found ourselves in a terribly challenging situation. So, a core question is why design? So many designers, young and well established, are troubled by the contribution that they're making now and are querying what the design function is, the ripple effect of everything that they're putting out there. All the more reason then, to talk about the *collaborative* redesigning of design-- to think more precisely about what the design function is. I think this goes exactly to what you said about the art function. More and more artists are working in social contexts and are using their community base and community constituencies as their raw material. If designers seem to gravitate towards the art object it's because they question what the designed object can do., They are not making objects that are going to contribute to a material culture and mass consumer culture that they no longer have any faith in. So, it's a difficult dilemma to be a designer now because of the legacy of the industrial and the consequences of social formation based on commodities.

FW: The production of material culture, which has always been a big part of artistic production, is questionably 'meaningful' when there is the glut of objects all around us from industrial commodity culture. Likewise, I would speculate that designers are interested in understanding the cultural and symbolic economy of their production, and so they have moved towards art as the place where there is the greatest fluency and consciousness, about the symbolic dimension of their production. This is a disciplinary

redirection, not being driven by problem solving, but by deep epistemological and ontological questions of how these world-making disciplines have come to function in the complex that is today's world, and how they will function in the future.

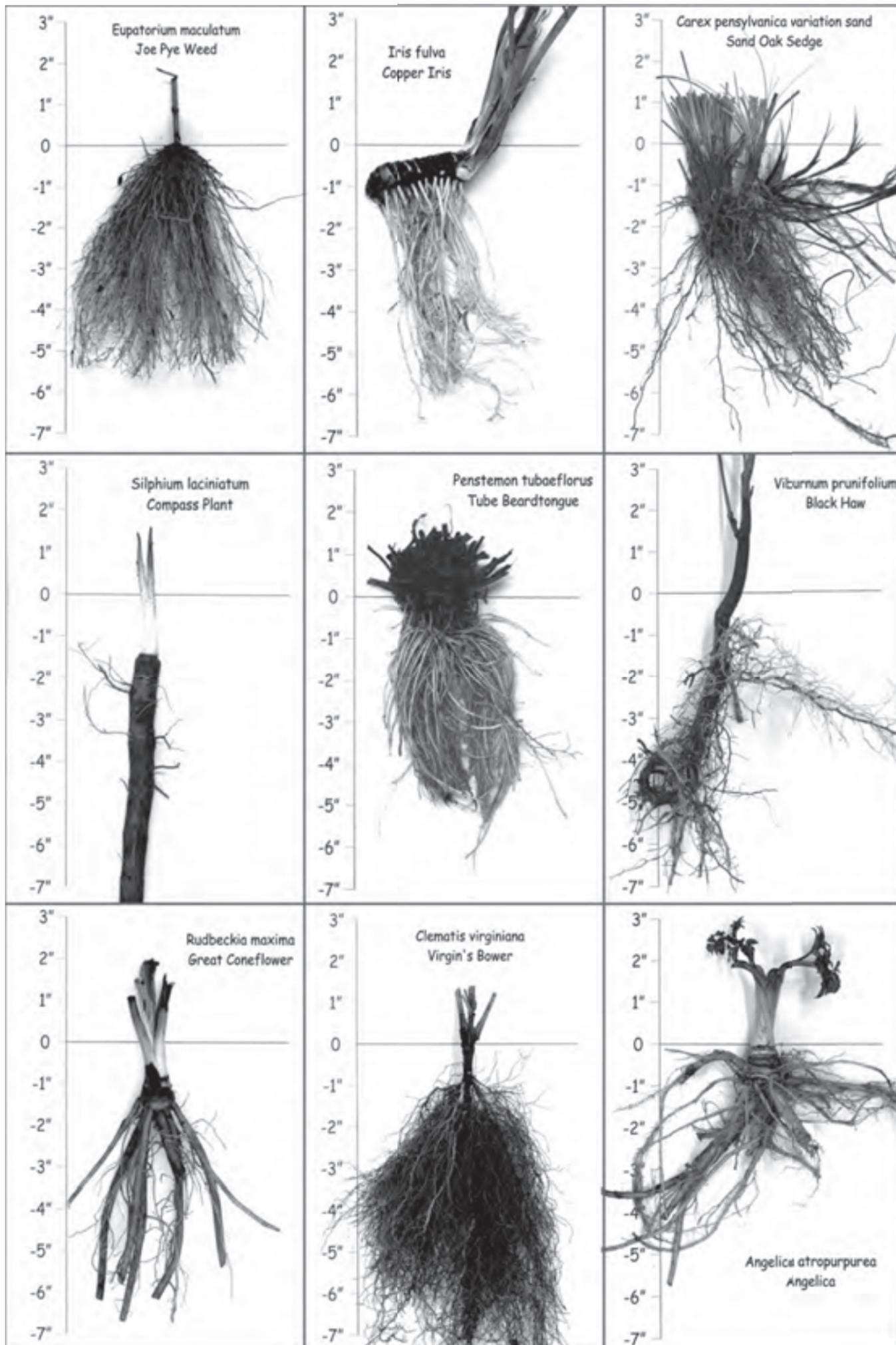
The Future

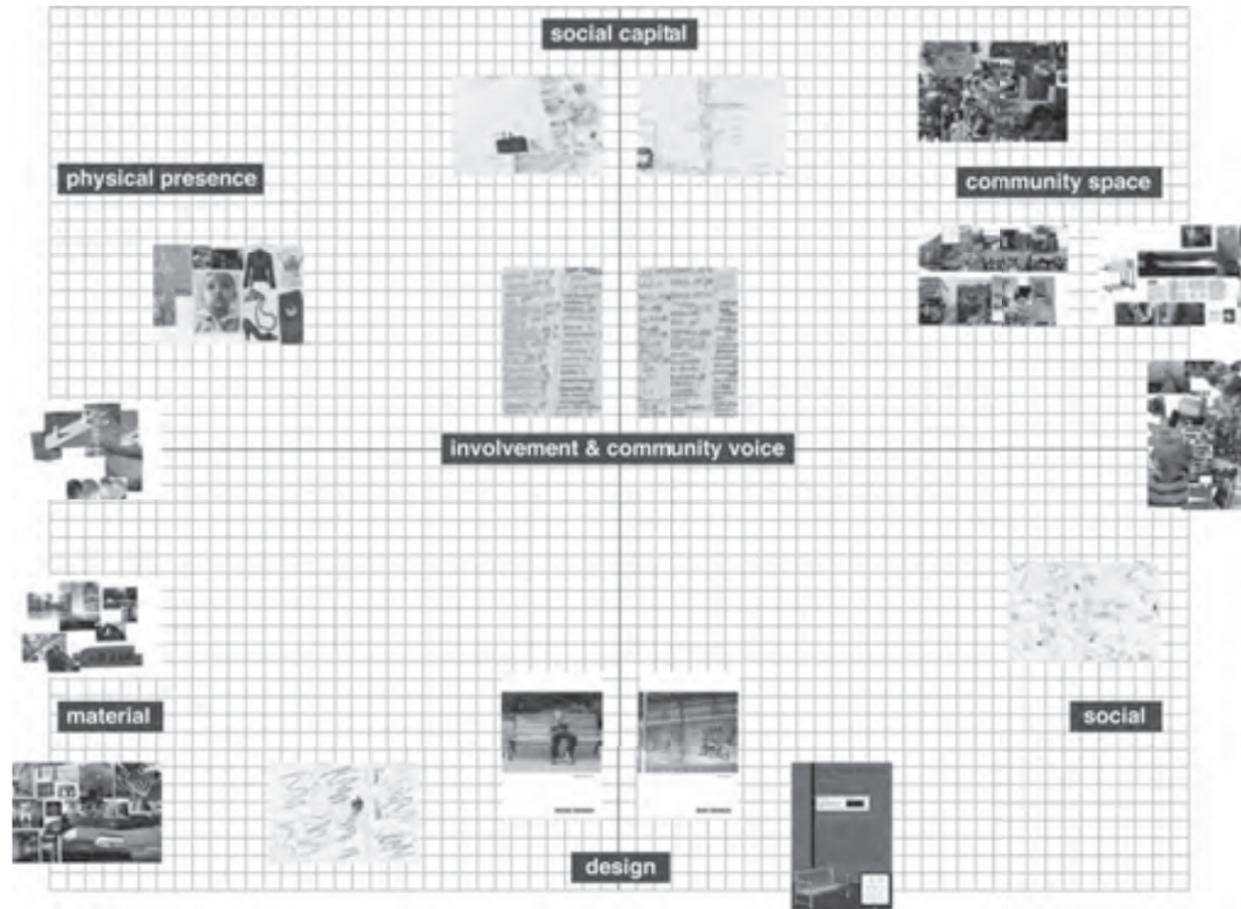
FW: As we think about the future, what people understand as realistic can turn out to be quite unrealistic. Is it possible to think about the future 'realistically'? Is this always an ironic proposition?

CA: It's not always ironic. **The future** is essentially just around the corner, and our future selves, the people that we're going to be, are not that far away. So being realistic about the future is essential to the way in which we construct our physical spaces, and what we imagine, in turn, they may do to us. Re-imagining a space and a life is central to this. The modernist utopia which we imagined was our future never arrived; the modernist project would appear to have failed its most important test, a better life for the less prosperous and those less visible in society. We are only just beginning to respond to the extreme conditions that we find ourselves in and we know that they are pressing and urgent -- population growth, mass migration, dissolution of communities, climate change, the petrochemical industry, the food system. All require radical action. So, perhaps we can try to characterize where we think the practices of art and design are instrumental in beginning to formulate ways of addressing those things, rather than simply papering over the cracks. More active involvement of the citizen in the conception of space, the expression of community and the dynamics of change are an attempt to restore people to the center of the discussion about how they will live.

The Design Matters Program grew out of a research project called the Urban

(left) © Michelle Litvin





slow CLEAN-UP

Designed Civic Experiments with Phytoremediation
City of Chicago, Richard M. Daley, Mayor

Abandoned Service Stations in Chicago, 2009

Slow Cleanup is a whole systems approach to site remediation designed to increase the net environmental benefits from plant based remediation processes. The designed plantings will contribute to the aesthetics and passive economic revitalization of the site areas, while simultaneously adding environmental value by creating habitat, green corridor connections, reduced heat islanding, carbon sequestration and biofuel generation.

Chicago Department of Environment, working together with academic, community, and conservation partners, will establish field trial test plots this Fall 2010. Nine other specific sites are in final evaluation or under development. Parallel to the field trials, bench trials will be performed to further evaluate specific plants as part of proof of concept.

Piloting the use of ornamental, flowering, and fruiting plants, along with the typical agronomic plants most associated with phytoremediation, this enhanced cleanup program aims to increase the plant palette for this alternative approach. Practical hurdles like depth of toxins will provide opportunities to "sculpt" the land, while necessities like fences will be designed for visual interest and access control. These phyto-scapes will be interpreted for the public, increasing awareness.

Additional funding is being sought to complete up to ten total sites within the next three years. Funding is needed for environmental sampling, site preparation and plant analysis and installation.

Phytoremediation Sites
Hydrology
City Boundary

0 2.5 5 10 Miles

Slow Cleanup - Follows Whitehall for Embedded Artist Project

<p>Excited IIII</p> <p>Confident II</p> <p>adventurous IIII</p> <p>Curious III</p> <p>entertained IIII</p> <p>amused IIII</p> <p>Sage IIII</p> <p>thrilled IIII</p> <p>included IIII</p> <p>Happy IIII</p> <p>Clean III</p> <p>dog free IIII</p> <p>tidy III</p> <p>invitable for all ages III</p> <p>inspired IIII</p> <p>comfortable IIII</p>	<p>stimulated IIII</p> <p>robbed IIII</p> <p>Peaceful IIII</p> <p>Successful II</p> <p>satisfied IIII</p> <p>quiet III</p> <p>expressive IIII</p> <p>intrigued IIII</p> <p>child-centred I</p> <p>variety I</p> <p>nice people I</p> <p>no drunks I</p> <p>delighted IIII</p> <p>graceful II</p> <p>colourful I</p> <p>dog-friendly I</p> <p>idyllic I</p>	<p>local park</p> <p>Swim-pool / deck / coop / privacy I</p> <p>Snack Shop I</p> <p>joyful I</p> <p>sensitive I</p> <p>greenery I</p> <p>accessible by car I</p> <p>interesting I</p> <p>children's play ground I</p> <p>tea house I</p> <p>no dogs I</p> <p>arcadian I</p> <p>art I</p> <p>music / singing I</p> <p>flowers I</p> <p>benches I</p>	<p>quality IIII</p> <p>family IIII</p> <p>individuality IIII</p> <p>fun IIII</p> <p>satisfaction IIII</p> <p>choice IIII</p> <p>safety IIII</p> <p>friendliness IIII</p> <p>accessibility IIII</p> <p>variety IIII</p> <p>pleasure IIII</p> <p>value IIII</p> <p>excellence IIII</p> <p>excitement IIII</p> <p>originality IIII</p> <p>conventional II</p> <p>character IIII</p> <p>tradition II</p>	<p>good books / records</p> <p>local shopping</p> <p>healthy foods I</p> <p>history II</p> <p>honesty IIII</p> <p>personality I</p> <p>humour II</p> <p>independence I</p> <p>beauty II</p> <p>relaxing II</p> <p>clean + tidy I</p> <p>security I</p> <p>history II</p> <p>entertaining I</p> <p>cheapness IIII</p> <p>free samples I</p> <p>waitrose model I</p> <p>good ethnic dishes I</p> <p>familiarity II</p>
---	--	---	--	--

community voice

Regeneration Practice and Theory Project. We were conscious that we were working in urban environments that were undergoing change, both from a political push, but also from the social side. The political side aimed to address the social ills that have been created through outdated urban structures. The practice of social reconstruction in the 20th and 21st centuries in the UK, had been one of 'make do and mend', a principle philosophically grounded in the wartime social context of recovery. The *Design Matters* model of social reconstruction puts community at the centre of everything, as a factor in transforming, maintaining, and holding society together and leads to the proposition of design as resourcefulness and self-reliance.

FW: There are some fairly radical, even fringe, dimensions in art that represent what I would call a re-localization of the cultural sphere that is a parallel development to the 'community' focus of recent design. This 'localism' is pushing back against a long-held 'internationalism' that we've seen as the dominant model of success for decades, and which primarily

values the international or global artist. In this case, as we factor in the urban challenges we face, design and art, can only be formulated aptly if we take into account conditions on the ground. This is where things become more specific; things reveal themselves to either be business as usual or *innovation*.

Innovation and the Wicked

CA: The word innovation has been appropriated too often. It's become so tired, it's exhausted its meaning and it is regarded with a degree of suspicion now. But more than anything, it's been commodified, become part of other systems, and has become synonymous with the 'corporate' and superficiality. How *do* we make innovation meaningful as action, not rhetoric?

FW: I've been thinking a lot about this term innovation and trying to leverage the cachet of the term with the **Embedded Artists Project (EAP)**. The simple concept is that if you could bring the problem-finding capacities of artists to ask new questions, and insert that

transgressively and disruptively into, in this case, city government, that perhaps we would find different problems, different questions, and different answers. We know that we cannot get to new solutions for intractable, complex, or as some people call them 'wicked problems',³ by the same methods that got us into those problems. I'm interested in the notion of innovation as an extension of the cultural aspiration of the avant-garde, but not a disconnected or elitist avant-garde. So, strategically, as an artist normally outside corporate design, outside civic or private innovation circles, it's been very handy to point out the long-term, the long-standing value of innovation and originality, even vanguardism, in the art community. Some may think this is a rather radical experiment in innovation, but innovation as commodified is indeed not enough.

CA: This will mean taking new constituencies, bringing them to these problems, and using their insights as a way of evolving new answers, as innovation. Contemporary architectural practice might better assist communities in realizing new ways to live in their



environment, faults and all, rather than resorting to remaking it. This is what's at work in new forms of community design engagement, but also in the work you have done with the Slow Cleanup Program and The Greenhouse Chicago, both of which re-imagine and re-purpose urban brownfields.⁴

FW: But problem-solving as an aim is also under examination. Marcel Duchamp said, "There is no solution because there is no problem."⁵ Perhaps we have arrived at 'Duchamp in Reverse'⁶ and are ready for direct engagement, whether you call this social sculpture, public practice or relational aesthetics. What is coming into view is a cultural complex, a multi-valiant field, with multiple positions that include connections between art, design, urbanism, and both problem solving and problem finding. Although artists have been understood as the stewards of mischief, tricksters, change agents, we're entering a time when this playful application of our expertise seems out of scale with the challenges facing us. The anomalous discrepancy in scale between what is at stake, and what can be leveraged, has begun to push artists

into other fields like design. And this same discrepancy is pushing designers as well.

New Demos

CA: These demanding urban environments require a truly radical kind of thinking in order to transform them. The 'process-based' and 'planning-led' approach to regeneration continues to subject our cities and our communities to superficial restructuring through erasure rather than rebuilding the demos from within. Making interconnections and complex connections between design and social functions are the most innovative areas of operation. The real transformation, and the real innovation within this paradigm, resides within the capacity of the individuals who are living in it and their capacity to use design. This has become symbolic of a **new demos**, a new democratic construction. This *demos*, a citizenry, if you like, is drawn together around the question of how they might *be* in the space that they are living in, *be* in their architecture to achieve a better quality of life. The innovation might have been taking place in some senses in the

material world, but I think through your description, it was taking place within those individuals as well. We begin to see that design can be instrumental in changing attitudes and not simply aesthetic attitudes, but at a deeper level. Design can be active as a mechanism for interrogating broader agendas.

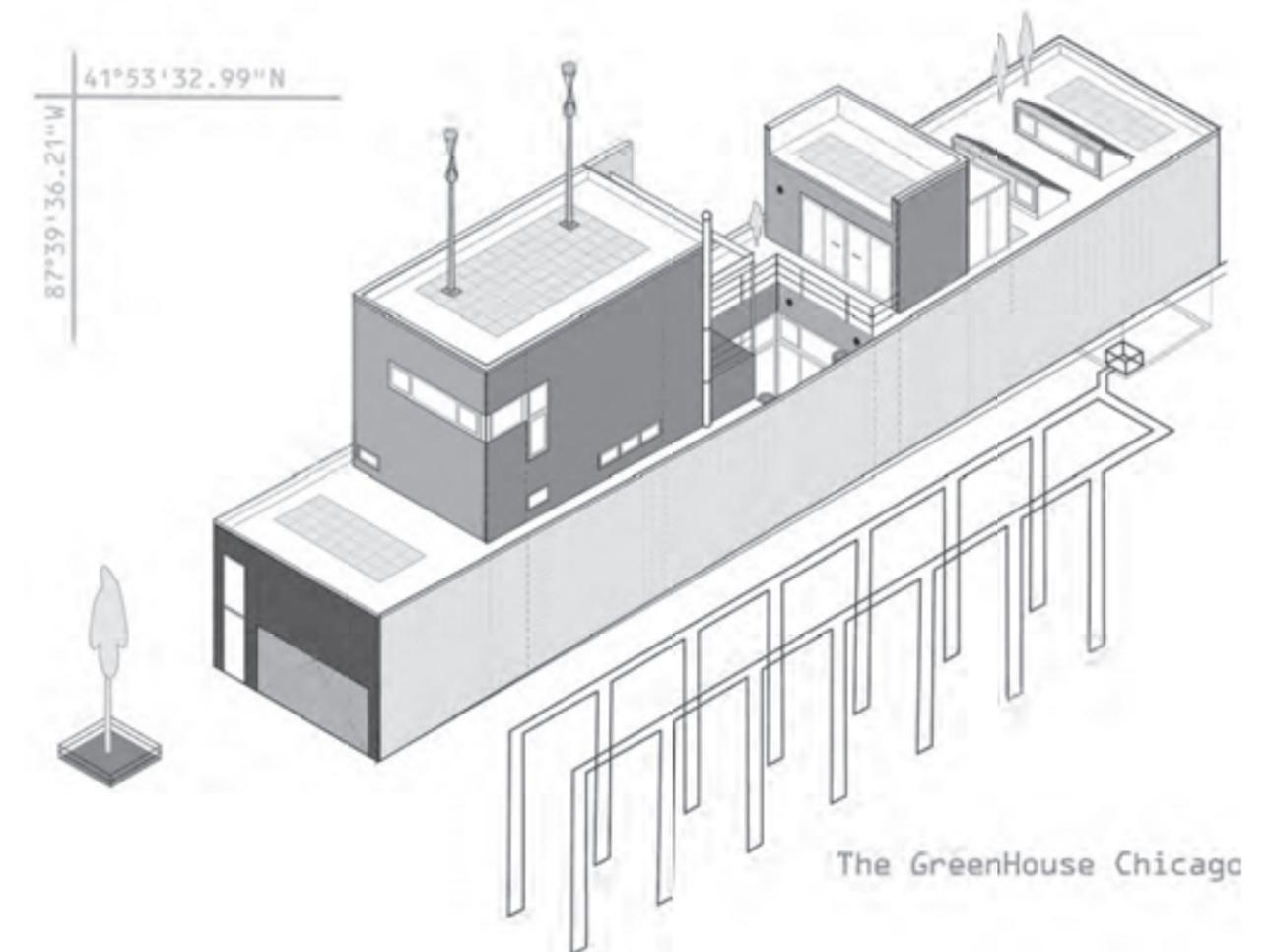
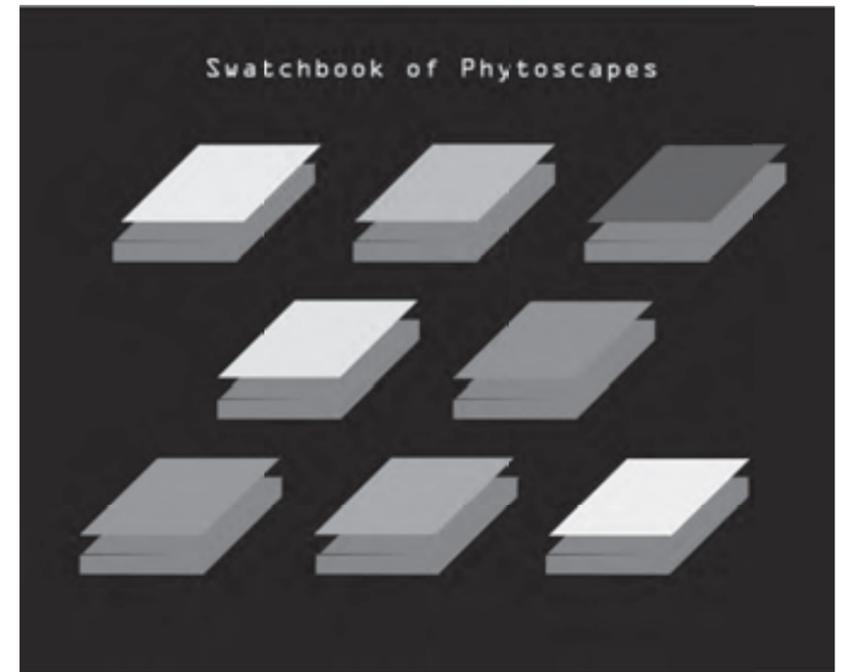
The result of this is that design became something that was not a commodity; it wasn't commodify-ing. It was something that was an active and dynamic force within socio-economic, socio-political constructions around a very specific constituency, which then led to other forms of engagement. Design at the outset may have been an instrument to understand the physical nature of the things that were going on around them, but in fact, eventually led to understanding of complex systems within government and within society.

Knowledge Transfer and the Transferable Model

FW: It seems like 'transfer' is such an important idea here. Now we're not just talking about origination or creation, but

of something that's a bit like recycling. We're talking about using things that may or may not already exist, and deploying them strategically, artistically, sustainably in a **place conscious** way that is appropriate to social community and also to environmental community in the biologic definition of community, which is all living things that occupy a given location. A much bigger sense of community.

CA: 'Transfer' can also sit very comfortably around **sharing** as a concept. This is something that we're still on the edge of, but we're beginning to really understand. Sharing is a key moment within any community where it begins to understand that individual ownership is not essential. If we take this principle of individual ownership in terms of intellectual property, or down to the level of transport - or as a broader metaphor



© Michelle Litvin



for the idea of sharing knowledge on every level, we are now **transferring knowledge** between communities. So re-contextualizing different forms of knowledge can produce new knowledge and 'capturing knowledge', making it work for us, connects it to other sets and streams of knowledge.

FW: These ideas about sharing are one form of 'social exchange.' Some people in innovation theory are talking about the unrecognized value of such exchanges, about **intangibles**. We are coming to understand how intangibles of all kinds influence a complex adaptive system, influence behaviors and decision-making. Yet only recently have these intangibles, very much like externalities of carbon, been on the ledger books. We can see that the social dynamics of sharing, gifting, non-compensation economies, social economies, idea economies, pushing the creative commons, as opposed to intellectual property ownership, all of these ideas are moving us to a place where both tangibles and intangibles on the map. This creates the **complex** that we will navigate in, whether the project is land reclamation, neighborhood revitalization, or changing public processes.

CA: But to enable knowledge transfer, what we're going to have to do is to challenge the organizations, as they exist at the moment. In fact, if we can reform community in a fairly small scale, then the logic of that might be expanded to reform government structures, and then expanded to reform socio-economic structures. Institutions at all scales need to adapt to this different **complexity**, different relationships between individuals and communities, and begin to re-think along the same lines. This is part of the EAP, transferring ideas and knowledge into organizational structures.

FW: To what extent 'embedding' creates organizational learning is still unclear. Or is it rather E.O. Wilson's idea of **consilience**⁷ bringing different knowledge(s) together on trans-disciplinary teams, but in this case constructing those teams with new kinds of members? It is unclear to me if the organization itself will 'learn' or if we will see the organization adopt new processes.

SLOW Cleanup

FW: Perhaps the real value of this kind of cross professional engagement lies in the projects, in how they model new ideas,

rather than in the personnel. Perhaps it's too much to expect career professionals to change their thinking merely by using a different process. So, I feel very strongly that the actual project is where the ideas are put to the test. The project that I've been doing with the EAP which we call Slow Cleanup, is really about deploying underdeveloped models from existing and new bio-remediation technologies, to broaden the toolkit for dealing with the wasted urban land. We are working with soil scientists to identify new plant palettes for petroleum remediation, and then applying those to a variety of urban conditions on abandoned gas stations. This project is, at first glance, not really involved in innovation, because people have been doing phytoremediation for twenty years. Instead, the innovation comes through the systemic ambitions of the project. One ambition is to make multiple systems **legible**, so by designing sites or creating this 'swatch book' of new landscape topologies we demonstrate the social, cultural, environmental and economic⁸ life of the sites, that is always present but rarely seen. But the other ambition, perhaps this is an aesthetic ambition, is to make **comprehensible** the temporal timeframes we've been discussing, to concretize the potential

Frances Whitehead

The Knowledge Lab Mission:

- Contend with **Complexity**
- **Innovate** through **Collaboration**
- **Inquire, research, exemplify**
- Work at all **scales**, global and local
- **Re-direct** contemporary practice
- Envision **Cultural Futures**
- Make **New Knowledge**

What are the pressing mandates for artists today?

Ethics and Aesthetics

- Beyond site-specificity, critical art practice, and relational aesthetics, artists must bring their creativity, knowledge and innovation skills to the collective table, creating tangible benefits and demonstrating alternatives.
- The vision and cultural values literacy of artists can contribute to cultural changes necessary to build a sustainable future, adding value through innovation to enliven, enrich, and enhance the quality and sustainability of the built world and the public realm.
- Demonstrate and explore the increasingly social role of art, strengthen ties to audiences, communities and constituencies new and old. Build geo-cultural place-based identity, art and design.
- The traditional role of artist, to make the invisible visible, takes on new meaning given the importance of understanding the inter-connectivity of ecologies, economies and relationships that make up the geo-cultural landscape.

Re-directive Practice

Within a larger framework than contemporary art, some ideas to consider are:

- **Futuring, future visioning** - Expand focus to include possible futures for our larger region; its economic, industrial, cultural and environmental health and vitality. Work backwards from outcomes, change behaviors, see what's coming.
- **Reconnect to the Realities of Place** - Deeply researched, place-based art and design is key. Tie socio-political reality to cultural and geo-ecological reality, generating concepts, iconography, outcomes.
- **Whole-systems Thinking** - Encapsulates the idea that positive and lasting contributions must begin by considering the entire region geologically and holistically, from the standpoint of interdependent systems.
- **Contend with Complexity** - spatial literacy - Mapping has emerged as a both a tool and a concept for understanding complex phenomena and locating oneself culturally and geographically. The increasing distribution of locative new media technologies, available in all sectors, has given rise to an opportunity and need to explore the larger meanings of mapping and increase spatial literacy.
- **Transferable models/ Demonstration Projects** - Projects and sites might be developed as models, demonstration projects which could contribute to the global dialogue about sustainable communities. Borrow technologies from other cultures, re-examine local "givens".

Christine Atha

"Design Matters, and The Urban Regeneration Practice and Theory Project, aimed to develop and test a variety of approaches to issues of regeneration practice brought about by government, institutional and organisational challenges."

This is the rubric we were using.

The paradigm for design in community is now:

- think about the future – in a realistic way,
- ask "Why design?"
- innovate and explore ways to transfer knowledge
- build all capacities



for transformation, and to demonstrate the shift from the construction of gray infrastructure to reconstructing green infrastructure. In other words, to re-value *slowness*, re-value deep work, and help the public understand why this is important, on a site-by-site, neighborhood basis. But, exploring this 'cultural hypothesis' for innovation is possible because Chicago is such an entrepreneurial city, and is serious about **integrated innovation**.⁹

Although there is one mechanism by which organizational learning may certainly take place, through changes in rules and regulations that come from the projects. We have been expressly asked to keep track of insights and observations on our process, to extrapolate operative principles from the project/process and to reflect back to city employees' things that we observe about existing methodologies so that new rules can be formulated. Bringing the reflexivity of standard creative practice to regulation formation is so interesting, as a method to institutionalize new practices, new insights. Already one new rule, a very simple but profound rule, has come from the preliminary phyto

work, which is that when you pull out a leaky tank, fill the hole with native soil; don't fill the hole with gravel. Re-establishing the soil continuum on site maximizes the opportunities for brown field reuse, in numerous ways, including ecological restoration and new emerging remediation technologies. Twenty years ago, when they changed the regulation to fill in holes with gravel, ostensibly for public safety, it was imagined to be 'best practice'. Now we have learned that this **best practice** is, perhaps, not best at all.

CA: Context is key where best practice models are concerned. Making new regulations, especially for local government, putting them into the day-to-day processes, may work well in a few places, but it is a mistake to think that 'best practice' can simply be transferred between contexts without being **conscious** of local conditions.

FW: Another word that comes up here of course is synthesis, meaning here, a judicious and appropriate mix of practices and of technologies aptly delivered, aptly installed, whether you call that art or design.

Extreme Conditions – the Post Industrial Future

CA: We could say then that the response to extreme conditions doesn't have to be extreme to have an effect. What we're examining is small but very well placed interventions that make a substantial difference. This goes to the notion of the **paradigm shift**¹⁰ that you don't have to be extreme in order to bring about extreme change. But you must be in the right position in the organizational structure to make sure that you engage the moment of change within those complex structures.

FW: A lot of artists have gotten interested in the idea of 'making sustainability tangible'. So, if you understand art as a communication system, you can see that creating works that demonstrate or make tangible complex models, models of complex systems is crucial, the 'demonstration project'. We have to expand the **imaginative capacity**, the envisioning capacity of everyone from businesses, city officials, and communities. This is something people in art/design take for granted, but it is very important



that people be able to envision a different future and find themselves in it.

CA: But once envisioned, we must have the capacity to implement, so capacity building is a key element. One of the things that the *Design Matters* program tapped into was that everybody has inbuilt capacities that they're not able to use without access to the right context to use them. I do think capacity building, but also exploring and exposing hidden capacities, is going to be one of the major pieces of work that we're going to have to do. It's creating a new citizenry effectively. This is the (re)construction of the **demos**, where we expose what we are capable of doing, making knowledge transfer really work. Over the last century we have been disempowering people, which has completely undermined many social structures. Where does the acquisition of **social capital** begin? We encourage a certain type of citizen

through design within regeneration projects. Is it possible to raise social cohesion and integrity through design? Through art?

FW: But to take that same phenomena that you've described and to cast it in the language of energy and efficiencies, we could say that if we look at resources, capitals, and capacities, that the industrial model in the name of efficiency was actually incredibly inefficient because it wasted human capital and we can no longer continue to carry the cost of any wasted resources. So, capturing that social capital, that human capital, that imagination capital, is imperative because in place of those intangible capitals we have been spending material, tangible capitals we cannot afford. By foregrounding the intangible dimensions, the social, the aesthetic, the socio-cultural, we're fully utilizing **underutilized resources** that

have been discarded as a waste product. I think that that's another kind of capture that we have to do, in social terms, and it allows people to participate in the public sphere, in the demos.

CA: In other words, the complex connection between layers is really what we're trying to contend with. This networking together across these ecologies and communities is the way in which you can expand the understanding, and identify exactly where the **change point** will come. This is not then about merely encouraging 'participation' or 'community action' but rather about understanding systems and putting them to work.

FW: I think that calls for us to envision a **complex**, fully systemic world, which we have not been able to collectively imagine in the last hundred years. And that's really the challenge.

1 Klinkenborg, 2005 <http://www.nytimes.com/2005/08/23/opinion/23tue3.html>
 2 Bourdieu, Pierre. *Outline of a Theory of Practice*. (Cambridge: Cambridge University Press, 1977)
 3 Rittel, Horst, and Melvin Webber, 'Dilemmas in a General Theory of Planning' pp. 155–169, *Policy Sciences*, Vol. 4, (Amsterdam: Elsevier Scientific Publishing Company, Inc., 1973) [Reprinted in N. Cross (ed.), *Developments in Design Methodology* (Chichester: J. Wiley & Sons, Chichester, 1984) pp. 135–144.], Retrieved 9.1.2010 from: http://www.ucc.net/mwebber/Rittel+Webber+Dilemmas+General_Theory_of_Planning.pdf

4 <http://www.embeddedartistproject.com>, and <http://www.thegreenhousechicago.com>
 5 3. This comment seems to have been quoted for the first time in Harriet and Sidney Janis, 'Marcel Duchamp: Anti-Artist' View, series V, no. 1 (March 1945), p. 24; it is repeated again in Winthrop Sargeant, "Dada's Daddy," *Life*, vol. 32, no. 17 (April 28, 1952), p. 111. Retrieved on 9.1.2010 from: http://www.toutfait.com/online_journal_details.php?postid=47066
 6 F. Whitehead from 'In Chicago, an Art Project Tinted Green' Mimi Read for the *New York Times*, 3.13.2008. Retrieved on 9.3.2010 from http://www.nytimes.com/2008/03/13/garden/13chicago.html?_r=1&ref=garden

7 Edward O. Wilson, *Consilience: The Unity of Knowledge*, (New York: Knopf, 1998)
 8 This rubric is based on Jon Hawkes 4 pillar model of sustainability, Australia, 2001. Retrieved from: <http://burgosciudad21.org/adftp/Jon%20Hawkes%20-%20Fourth%20Pillar%20of%20Sustainability.pdf>
 9 Term used by Chicago Department of Environment Commissioner, Suzanne Malec-McKenna, supported by Mayor Richard M. Daley's environmental ambitions. From conversation with SMM, throughout 2009, 2010.
 10 Thomas Kuhn's *The Structure of Scientific Revolution* (Chicago: University of Chicago Press, 1962)