

learning to look

what designers do. what students need to know.

THE STUDY

Why do some city spaces seem to work better for people than others? This simple question has motivated social researchers and designers for decades, and it is at the root of this inquiry.

This study offers a glimpse into how today's leading landscape architects consider the social aspects of design in their urban projects. The goal is to understand how research on the subject – the relationship between human behavior and the designed environment – is used or not used in contemporary practice.

Twelve designers of high-profile urban landscapes were interviewed for the study. Each had designed an urban space that was featured in *Landscape Architecture Magazine* between 2009 and 2011, or that won an ASLA design award in the same time period. These are the practitioners who are shaping the discussion and the design of today's cities.

This study should be considered the beginning of a conversation. Further research is recommended in a number of areas: would a follow-up study with a larger sample size yield different results? To what extent do practitioners use social research on more specialized environments like outdoor spaces for hospitals, child care settings, or elderly housing? In what ways is the topic incorporated in studio instruction or elective courses in landscape architecture curriculum?

For now, the best outcome of the study would be to build on the awareness among practitioners of basic principles for successful social spaces, resulting in even more streets, plazas, and parks designed to meet the needs of the people who use them.

Study findings are encouraging. They provide a practice-based rationale for important, yet achievable, changes in design education to prepare tomorrow's designers for the challenge of creating socially sustainable urban open space.

ENVIRONMENTAL DESIGN RESEARCH

The study of how spaces and places affect people, and vice versa, is known as environmental design research. This specialized field of social science research originated in the 1960s, and groundbreaking work on human behavior in urban space was done in the 1970s by researchers like William “Holly” Whyte and others.

These researchers conducted studies using the fundamental research method of direct observation, as well as other methods including the analysis of physical traces, focused interviews, and surveys. The primary goal was, and still is, to improve the quality of the human environment through research-based design. It is an academic discipline with practical applications.

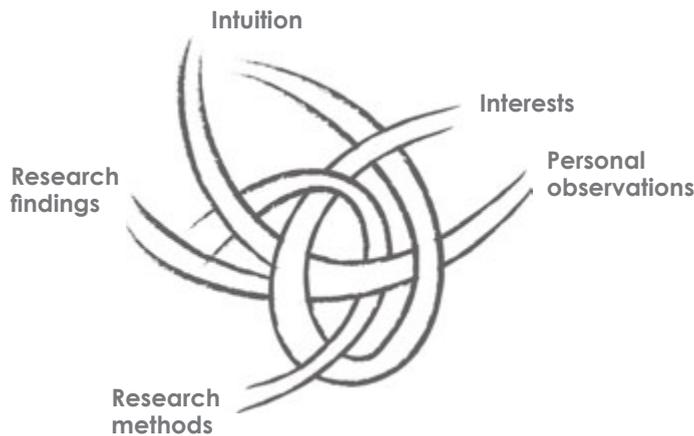
Researchers generally agree that to make an impact on practice, their findings must be translated to language that is understandable and compelling for designers.

Design guidelines are one way to translate research findings for use in practice. Many researchers acknowledge the limitations of behavior-based design guidelines but believe they may still be “the richest and most detailed, least coercive, most dependent on logic and inspiration, and most tailored to the design process.”¹

Some researchers also agree that despite their best efforts, including the publication of current research in *Landscape Architecture Magazine*, “there is still a staggering lack of knowledge of these resources in the design professions.”²

In design education, the subject is not part of the required curriculum for accredited landscape architecture programs. Neither is it included in the professional licensure exam.

INTEREST AND INFLUENCE



"It is hard to untie influences from our own interests and agendas. They all become mixed at a certain point."

"I remember a lightbulb going off when I started reading about Karl Linn in school, and making these connections between what we do and sociology and psychology – because what we do is all about people."

"I will be upfront and say that I never focused explicitly and directly on that research or its specific applications."

The landscape architects in this study identified distinct yet intricately connected components that influence their decisions relative to the social aspects of design.

While environmental design research methods and findings were among the factors cited, translations of this research were not. Translations are not used by the study participants.

For many, exposure as a student or young professional fueled their interest and exploration of the subject, but not all participants shared the same enthusiasm.

The study suggests, however, that designers understand many of the principles for successful social space that have been generated or tested by environmental design research – regardless of their stated level of interest in such research.

The methods and findings of environmental design research appear to be widely accepted by today's designers, despite a variety of objections to translations like design guidelines.

INTUITION

Practitioners rely on intuition, rather than research, to inform their decisions relative to the social aspects of design. All but one of the designers in the study used the term "intuition" or "intuitive" when describing their design process.

Intuition is defined by the *Oxford English Dictionary* as the "immediate apprehension of an object by the mind without the intervention of any reasoning process." Without thinking or reasoning, many landscape architects intuit much about what makes a place responsive to the needs of those who use it.

A designer's intuition, though, is informed and enhanced by his or her accumulated experience as an observer and a participant in the life of the city.

The question arises: in what ways and to what extent can environmental design research strengthen a designer's intuition... if it can at all?

Some participants acknowledged that environmental design research has "seeped in" and become a part of their thinking, but none expressed an explicit relationship between research and intuition.

In large part, the study suggests that what was once considered cutting edge research has been absorbed into a common knowledge base shared among designers. Holly Whyte's findings, for example, on seating, choice, sun and shade, edges, water, and many other design features are now considered common sense – or intuition – by practitioners.

"There is sort of an innate sense of what will work for people and what won't, but it's not based on a tight grasp of the research or an ongoing pursuit of that information. It's more in the background, informing decisions in a somewhat looser way."

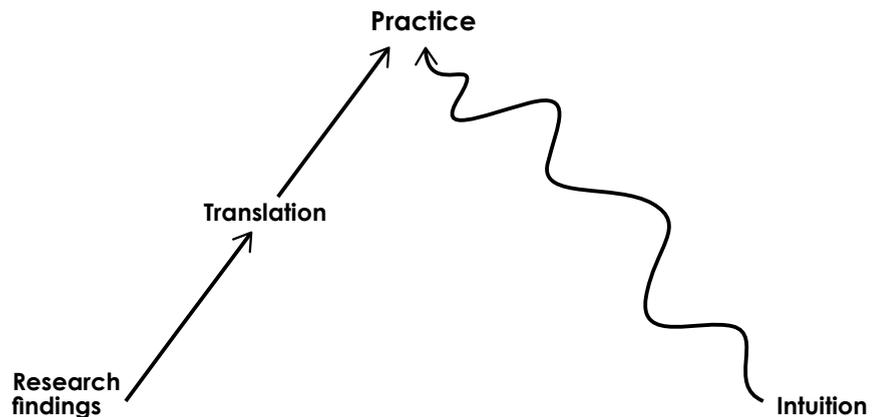
"A lot of the design process is intuitive, just the power of observation and how you as a human being go and move around in the world. I have always been in tune with that, so to a certain extent it hasn't mattered to me what some study says."

DIVERGENT VIEWS

The perceived dichotomy between intuition and research has been noted before and is not unexpected: “a major source of difficulty in collaboration between research and design is that both types of professionals feel that intuitive judgment and scientific research are mutually exclusive rather than mutually enhancing or even mutually dependent.”¹³

Rather than challenging and enriching one another’s methods and findings, researchers and designers are placed at odds about how best to understand human behavior in public space, and how best to apply that knowledge to design.

These two perspectives result in different approaches. Environmental design researchers strive to impact practice by translating their findings for designers to apply. Practitioners, on the other hand, rely on intuition when making design decisions relative to human behavior. Theirs is a non-linear process.



“We don’t consciously use resources on human behavior, though I am sure the principles enter into how we design. I would say that it informs a lot of our design decisions kind of informally.”

“It’s okay that researchers are out there documenting behavior. It’s not okay in my view that researchers are turning that into strictures for how to design. It’s great to know Holly Whyte’s observations. It’s not alright to portray them as a set of rules.”

OBSERVATION

Yet designers and researchers engage in a shared activity. They all use their powers of observation to understand human behavior.

The process of observing behavior is one of discovery. Study participants described watching and recording how public space is used as a routine part of their design process. This activity, in turn, helps to hone their intuition.

The designers suggested that it is not enough to study observations made by others (Holly Whyte and Jan Gehl were mentioned most often) without also spending time personally observing people in public space.

The seemingly greater acceptance of Whyte's and Gehl's work could lie in the presentation of their findings. Whyte's film, *The Social Life of Small Urban Spaces*, and Gehl's book, *Cities for People*, are comprised largely of visual images. They offer windows through which the reader and viewer can observe human

behavior right along with these respected authors. In this way, designers are invited to draw their own conclusions and to integrate the researchers' findings with their own.



Cities for People © 2010 by Jan Gehl

The more a designer observes people, the more his or her intuition will be honed, leading to design decisions more likely to account for what has been learned. Observations made by researchers can enhance this process, but not replace it.

"The kind of photography I've trained myself to do after all these years is to record how people really use the space, to be aware of what the sun's doing, what the temperature's like, is it noon when everybody's out for lunch, is it the sleepy afternoon hours before the dinner crowd comes back, is it a weekend? I try to be conscious of all those things."

"It really involves getting out there and spending time fully understanding urban neighborhoods, block by block, and that's the kind of research I do. It just doesn't get documented. I don't know if a better awareness of Holly Whyte's book would do much."

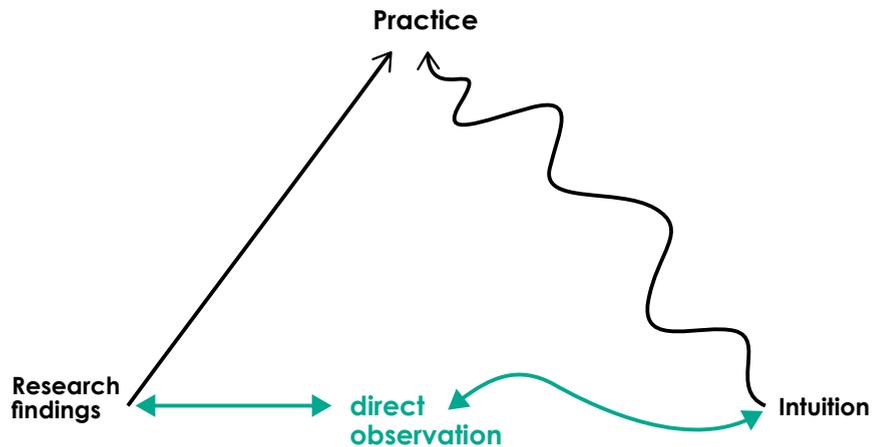
COMMON GROUND

This fundamental research method – the careful act of direct observation – offers a link between researchers and practitioners.

The study participants acknowledged that their methods are not as scientific as those employed by researchers. But the relationship is clear. It is also clear that the quality of a designer's observations directly impacts the relevance of what is observed.

Researchers have noted that field work for the most basic level of evaluation of a public space (called an "informed journalistic critique"¹⁴) can be accomplished in two site visits of 1-2 hours each using standard methods to answer the question: who is doing what, where, and with whom? Could a more complete understanding of these methods lead to higher quality observations?

"There are different levels, call it scientific observation, to rules of thumb, to just personal experience from observing spaces and thinking about spaces."



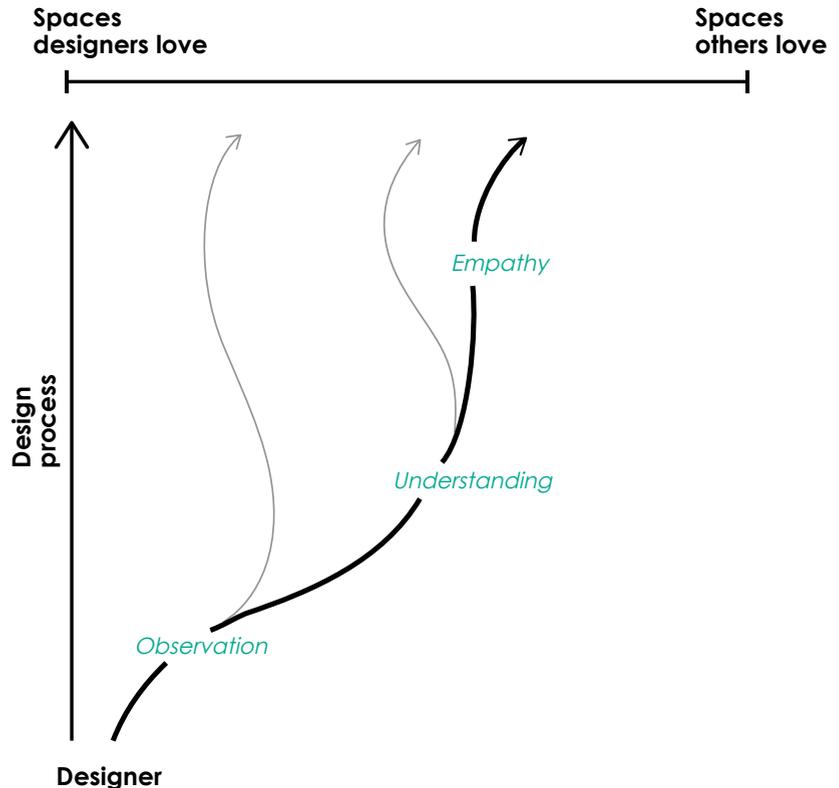
Observations are more accurate, sensitive and systematic if the observer knows how to watch and record human behavior carefully and critically. Are today's students prepared to observe how public space is used when they enter the profession? Do they understand that their observations fuel the intuition they will rely on as practitioners?

EMPATHY

Observing human behavior is not enough, however. For designers to create spaces that are loved and that meet the needs of the people who use them, they must develop empathy for those users.

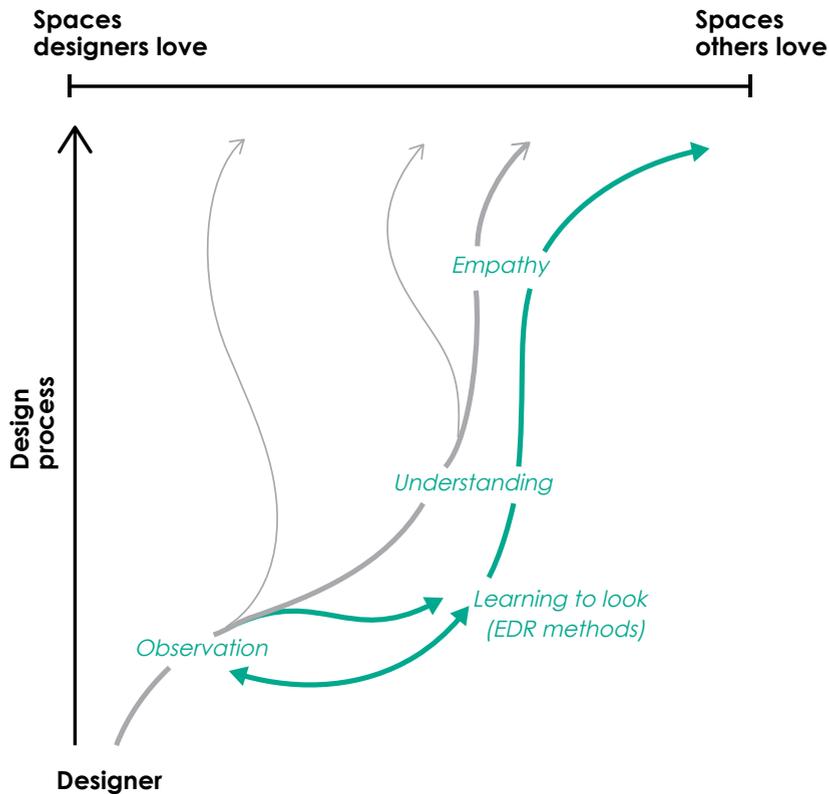
But how is empathy acquired? Like intuition, empathy grows as one experiences the world and internalizes the meaning of those experiences. Watching, listening, and interacting with people is the surest way to understand them, and to develop a true sense of empathy.

This ongoing process is directly related to the growth and maturity of the design process. As designers and students spend more and more time observing others, their understanding of people's needs grows, and their empathy for them deepens. As their design process evolves, they will be able to create spaces that are more likely to be loved by the people who will use them.



Personally observing how people behave in public space leads to deeper levels of understanding and empathy. This evolution of the design process ultimately results in spaces that people love and that meet their social needs.

EVEN FURTHER



When designers and students have learned how to look – when they have mastered the fundamental social research method of direct observation – they can design spaces even further along the spectrum toward meeting the needs of others.

The field of environmental design research offers designers and students the tools to become better observers – it can help them learn how to look. When a designer's skills and techniques for observing behavior are based on accepted research methods, the entire evolution of the design process shifts.

The observations of designers and students will be improved when basic research methods for direct observation are used to their fullest advantage.

In this iterative process, a designer's practical experience is also of value to researchers by helping to identify areas for future research.

The field of environmental design research becomes a framework for inquiry, enhancing a designer's ability to formulate important questions about the social aspects of design, to synthesize what they observe, and to apply their findings in practice.

DESIGN EDUCATION: RECOMMENDATIONS

Reframe research

Students should understand that the direct observation of people in public space is a fundamental method of social research, that practitioners regularly engage in this activity, and that the process of observing behavior will directly inform their intuition.

They should be taught how to conduct a basic observation and evaluation of a public space (an informed journalistic critique) and be required to apply their findings in studio projects. In so doing, they become novice researcher-practitioners.

The findings of environmental design researchers like Holly Whyte, Jan Gehl, Clare Cooper Marcus and others could be introduced as supplemental resources to broaden and deepen students' understanding, but only after they have begun to internalize their own research findings.

Curriculum

The Landscape Architectural Accreditation Board should require that basic environmental design research methods be taught in accredited landscape architecture programs. Suggested language to reflect an experiential approach could read:

Students will learn accepted research methods for the observation, documentation, and evaluation of designed landscapes, relative to human behavior. They will demonstrate a proficiency in this process and be required to explain the application of their findings in design projects.

A new resource: Learning to Look

Students should be given tools that will help them to develop their intuition. A recent study by prominent physicians is relevant to the challenge of teaching an intuitive process. The study concluded that doctors can, in fact, learn to have a better bedside manner – perhaps the most intuitive skill of all. It found that a separate course on the subject was not required; a short, personalized computer intervention proved to be effective.⁵

This approach should be considered for design education. Rather than adding a survey course on environmental design research to an already dense curriculum, a short and practical intervention could supplement studio instruction. This tool would teach students how to be keen observers of public space and to consider how human behavior is influenced by design.

A NEW RESOURCE: LEARNING TO LOOK

The recommended format for this new resource is a 45-55 minute DVD that can be integrated in early design education. The content is critical. It must have weight. The presentation is equally important. It must appeal to today's students.

"We live in a world of 15 second sound bites and visual flashes, and it's okay to fight fire with fire sometimes. For important issues it's okay to 'stoop to that level' to get the message out."

The goal is to inspire students to explore the social aspects of design in contemporary urban open space, and to think critically about the relationship between design and human behavior.

Objectives

- Teach basic direct observation research methods and techniques using the informed journalistic critique as a model
- Reinforce key principles of socially sustainable design
- Introduce students to a variety of contemporary urban open spaces
- Illustrate the connection between research and practice regarding the act of direct observation
- Offer the field of environmental design research as a resource

Components

- Instruction for the direct observation, documentation, and evaluation of public space
- Footage of students conducting direct observation
- Footage of practitioners conducting direct observation
- Footage of people using contemporary urban open space
- Excerpts of Holly Whyte's film, *The Social Life of Small Urban Spaces*
- Interviews with experienced designers and young practitioners
- Plans and renderings of contemporary urban open space
- Exemplary student design work

PRACTICE: RECOMMENDATIONS

ASLA awards criteria

Many have suggested that the criteria for ASLA design awards should include post-occupancy evaluations that document the social success of winning projects.

This study reaffirms that suggestion and recommends that firms be required to work with students to conduct these evaluations, thus offering students valuable experience and meaningful collaboration with practitioners.

Professional development

Professional designers, particularly those new to the field, could be trained to apply basic research methods to their practice of observing human behavior in public space. The resource created for students could also serve as an introduction for young professionals. Firm-specific procedures for conducting evaluations could be established, as described by one study participant.

Promotion

To reinforce the connection between what students are learning about direct observation and what designers routinely do in practice, a respected practitioner could promote it through established channels: *Landscape Architecture Magazine*, the ASLA conference, professional organizations, and social media.

Most study participants made statements about the responsibility of designers to create socially sustainable spaces. Some described the role that good social design can play in helping firms to win projects and design competitions. Students should hear these messages directly from practitioners.

Licensure

The Landscape Architect Registration Examination should test for a basic knowledge of the direct observation research methods used in environmental design research.

"There is power in being able to tie why you do certain things with a space back to a very real, almost science-based rationale. It's documented. It's lent a lot of weight to our design narrative."

RESPONSIBILITY

"I think a designer's primary responsibility is to look and listen and understand what's needed and what's of value, and to effectively incorporate that into your design vision for a place. It shouldn't compromise it, it should actually make it richer and deeper if you do it right. But therein lies the challenge."

NOTES

¹Chapin, David, and Clare Cooper Marcus. 1993. Design Guidelines: Reflections of Experiences Passed. *Architecture & Comportement = Architecture & Behaviour* 9 (1) (1993): 99-120.

²Marcus, Clare Cooper. 2009. The Past, Present and Future of EDRA-Based Research. Paper presented at EDRA 40, Kansas City, MO.

³Reizenstein, Janet E. 1975. Linking Social Research and Design. *Journal of Architectural Research* 4 (3) (Dec 1975): 26-38.

⁴Marcus, Clare Cooper, and Carolyn Francis. 1998. *People Places: Design Guidelines for Urban Open Space*. 2nd ed. New York: Van Nostrand Reinhold. A description of the methods and process for an informed journalistic critique is on pages 346-347.

⁵Tulsky, J. A., et al. 2011. Enhancing Communication Between Oncologists and Patients with a Computer-Based Training Program: A Randomized Trial. *Annals of Internal Medicine* 155 (9) (Nov 1): 593-601.

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