

research, Spirm began to see connections between urban blight and topography. Specifically, she began to see that generally speaking the poorest people were living in the lowest areas, while the financially better-off people inhabited the hills. To a certain degree there was nothing new in this; quick-witted observers since Dickens had made this same connection. But what Spirm saw, from the perspective of landscape architecture, was that these lowlands, or bottoms, were generally places where rivers and streams once ran, but which, since the nineteenth century, had been buried in sewers. On the face of things they didn't look like bottoms at all. There was no actual river that the eye could

see, and if you disregarded the social fabric, Dudley Street in the 1980s looked like just another part of the vast urban grid spreading out from downtown toward the suburbs to the south and west. But Spirm knew that, for all the engineering might that has converted the streambeds into paved streets, water was water and stormwater was something fiercer. She began asking questions. Did the planning data that showed vacant land and other indicators of urban blight correlate with the dendritic patterns of water over land? And if it did, what was the logic of cause and effect? How did a postindustrial "bottoms" reveal itself, and what did this mean for the social and economic welfare of the people living there or, for that matter, the city as a whole? Before Spirm could get much further in Boston, she was whisked away to the University of Pennsylvania to assume chairmanship of the landscape architecture department there. She brought with her these same questions. As it turned out, Penn proved a much more fertile ground for this type of research.

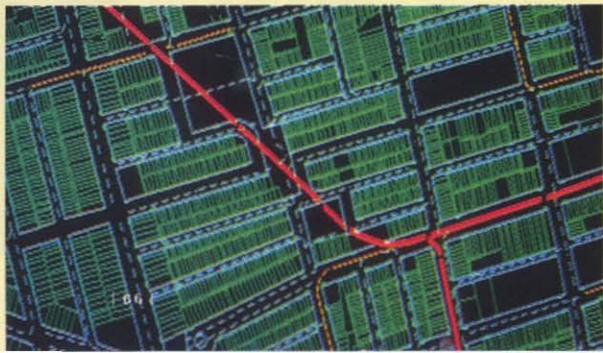
The University of Pennsylvania is located in West Philadelphia, a short jog across



Landscape Organism

*After thirteen years,
can the West Philadelphia
Landscape Project become
more than the sum
of its parts?*

BY PAUL BENNETT





the Schuylkill River from downtown, or Center City, but a world away from the thriving corporate canyons of Market Street, the upscale bistros and hip bars of Rittenhouse Square, or the tourist-trekled environs of Independence Hall. With the exception of the small area around the university, the neighborhood experiences high unemployment and violence, and drugs are still epidemic. But perhaps the most startling statistic is the urban vacancy rate. Some neighborhoods have lost up to fifty percent of their population over the past twenty years, the result of “white flight” and the migration of the black middle class to the suburbs. But Spirm hates to rely on these kinds of statistics and planning data alone, in part because they fail to fully grasp the problem. As in Boston, Spirm was looking for the deeper landscape patterns underlying these statistics. She also bristles at the pervasive use of disembodied numbers and abstract data in planning, because they point narrowly at a supposed “problem” and fail to recognize that to begin to plan for a place like West Philadelphia one not only has to understand the problems, one also has to understand the resources.

Spirm began the West Philadelphia Landscape Project (WPLP) in 1987 in partnership with a philanthropic branch of the Pennsylvania Horticulture Society called Philadelphia Green. Philly Green had an interest in creating open space in poor neighborhoods, both by designing and building small parks and by organizing community gardening initiatives. Spirm wanted to create a service-learning program at Penn where graduate students in the landscape architecture program would work with community groups to design these parks and gardens, both as a way to get experience in public practice—from charrette to review to research and analysis—and as a way to do research and analysis of the West Philadelphia landscape. But because the philanthropic institution behind the project wanted to see tangible results quickly, Spirm and her students had to eschew the traditional linear methodology—research, planning, and then design—and adopt a confusing, hectic, but eventually highly rewarding integrated process where the students might find themselves one day designing or building a garden and the next canvassing the neighborhood to gather data.

Over four years the WPLP helped the citizens of West Philadelphia build almost two dozen different community gardens. The largest and most successful of these was Aspen Farms, located in the Mill Creek neighborhood. Here students and staff from Philadelphia Green helped expand and formalize an existing garden. Besides investing sweat equity, Spirm and her students took many of the design problems back to Penn

IF YOU DROPPED A BALL here, where would it roll? Such questions about the Mill Creek Valley, top, were posed to schoolkids to help them examine their surrounding landscapes—too often victim to urban blight, below—in new ways. Opposite, a digital map of the same area.



and worked up solutions. For example, one year, in a studio Spirm co-taught with Gary Smith, the students developed ideas for a central gathering place in Aspen Farms. The design challenge was to create a functional space that would give the garden a strong, visible identity, but at the same time would refrain from impinging on the existing plots, each of which was individually maintained by a separate gardener. The designs were submitted to the members of the garden for judging. They picked a design by John Widrick, which simply expanded a central path through the middle of the garden so that all the plots were equally affected.

A major component of the studio was the experience of working with people from the community and learning how they use and view their surroundings. Each student was required at the beginning of the course to spend a weekend in a West Philadelphia

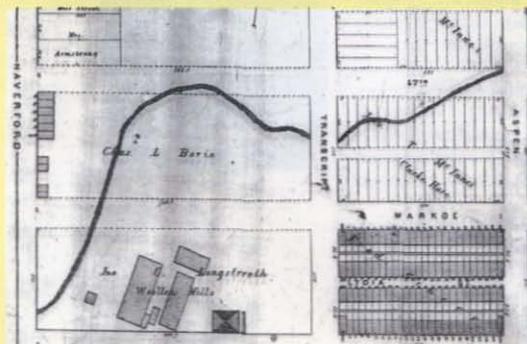
home, which had a transformative effect on the students, many of whom were white and from middle-class backgrounds. "You're going into someone's home and you see what is on the walls," says Spirm, "the diplomas, the pictures, the sayings; and suddenly you have a much clearer picture of who these people are and where they are coming from."

In addition to this kind of experiential research, Spirm had her students conduct more academic research, such as creating a database of geographic information on the neighborhood. Work in the project is primarily done by Spirm and her research assistants, thirty-eight in all since 1987. "Two of my courses are closely related to the project," Spirm explains. "This provides benefits: Students have access to a large database, the latest research, and community residents who have been associated with the project. But a class is not a faculty research project, and it is important to make clear a distinction between the two. As a teacher, I design a problem and coach students to define their objectives and devise their own solutions....As an employer, I direct research assistants and ask that they produce work in certain ways. Sometimes a student's work in class makes a contribution to the research project; in such cases, author and context are cited."

In this case, the research assistants had to hit the streets (census records were woefully poor), three to a car: one to drive, one to direct, and one to scribble furious notes about vacant land, landscape condition, and housing types. Back in the lab, the students assembled a vibrant colored map of the neighborhood that began to tell a familiar story. Much of the vacant land was lying in a dendritic pattern. When the students did the historical research, they found that Mill Creek had once flowed through the area, but in the 1880s it had been contained in a large (twenty feet in diameter) brick sewer, which ran a similar course beneath twenty feet of fill, finally emptying stormwater into the Schuylkill River south of Philadelphia.

The database that resulted from this work was published in reports in 1991 and on the Internet in 1996 and made available in the local library; but besides giving the students a fuller sense of the neighborhood, there was very little of a service element in the work. One of the goals Spirm realized she was striving for, pedagogically speaking, was to create a learning bridge between the students and the residents, so that the illuminating information they were unearthing wouldn't just sit inert in some office but could actually be used to educate people in West Philadelphia about their world. After the grant money dried up and Philadelphia Green went its own way, Spirm redirected the West Philadelphia Landscape Project to new vistas. For years Ira Harkavy, the director of the Center for Community Partnerships, had been badgering Spirm to join a group of other academics from the university who were doing community education.

ROW HOUSES IN THE MILL CREEK VALLEY have succumbed to subsidence, top, with many homes suffering from water damage and cracked and tilting foundations. To link current conditions to the past, Spirm and her young students studied old documents, including this 1880s photo of the Mill Creek sewer under construction, middle, and a map of the kids' neighborhood, circa 1878, bottom.





So she contacted Harkavy and—using his organization as a touchstone, resource, and inspiration—forged a relationship with Sulzberger Middle School, located in the middle of West Philadelphia and, as luck would have it, right on the edge of the Mill Creek sewer.

Since 1995 Spirm and her students have been developing a teaching curriculum for middle schoolers (grades six through eight) that uses the original research generated by the research assistants and students. For example, within the realm of social studies, the Penn students presented the middle schoolers with all the primary documents that they'd unearthed pertaining to the neighborhood, things like mortgage records, old maps, old photographs, and even hot-potato items like diagrams showing lending-reddened districts. The kids consumed the material voraciously, Spirm says, because it allowed them to see what was most familiar in a new way. One of the most powerful pieces of information was the census from 1880 that listed, by lot, the residents of the neighborhood and their occupations. From this the kids could see who had lived where they did (different house, perhaps, but same lot) a hundred years ago. The other things that interested them were the photographs and maps showing Mill Creek and the construction of the sewer, which was worked into a lesson on urban ecology.

Spirm brought her students into the school to work with a select

TANGIBLE RESULTS
from Spirm's project include nearly two dozen community gardens. For the Westminster Community Garden, a disused city lot, right, is transformed, above, with the inclusion of such pieces as a birdbath and a white rail fence.



group of four enthusiastic teachers. While the teachers looked on, the students from Penn used the materials from the landscape research and asked leading questions of the younger students. For instance, they would show a picture of the sewer being constructed in the 1880s and an atlas of the neighborhood from the same time, and lead the class through a progression of questions, such as: "Can you find this sewer on the map?" and then "Can you find Sulzberger Middle School on the map?" and finally, "Can you find Sulzberger Middle School in the picture?" Kids are quick, says Spirm, and when they begin working through the material on their own, it acquires a definite power. Some of the lessons are specifically landscape oriented. For example, two years ago students from Spirm's

A goal was to create a learning bridge
 between students and residents.



THE LARGEST and most successful community garden was Aspen Farms, in which students and volunteers helped to expand and formalize an existing garden, left, creating a stronger identity for the site, top.

Perhaps it's the curse of all effective visionaries, but after thirteen years Spirn is ready to embark on what she's calling the third phase of the WLP. One of the reasons she went into Sulzberger Middle School was to begin to change the way people saw their neighborhood. You use the kids to get to the adults, she says, but you also talk directly to the kids because they're open to new ideas and the paradigms of their thinking are more malleable. "Middle school is where dreams of youth and the reality of adulthood collide," says Spirn. But she still wanted to get to the adults, and she still wanted to get deeper into understanding the neighborhood.

urban studies class worked with the middle schoolers on a design for a mini-golf course that would reflect the landscape character and history of the neighborhood. Then landscape architecture students in the design studio worked on proposals for an outdoor "classroom" situated on a vacant lot near the school and sunken in the bottoms (stormwater played a major role in all the designs).

In many instances, the class material seeped out into other areas of the school curriculum as well. The mini-golf park, for example, was taken up by students in an entrepreneurship program who learned to use spreadsheet software and produced a business plan for actually getting the park built. The four teachers who became involved in the program have gone on to implement it schoolwide so that now almost all parts of the curriculum use some of the research to engage the children in a process of "place-based" learning. Underlying it all is Mill Creek, and West Philadelphia at large. "You're never far from landscape," says Spirn.

The third phase began by working with several community leaders in the Mill Creek section of West Philadelphia, people like Francis Walker, who founded the Mill Creek Coalition. Working with this group as research associates, Spirn has begun a process of community planning, beginning first with an intense investigation of the neighborhood. What, specifically, she wanted to learn was whether there was truly a problem with subsidence in the neighborhood. In their research the students had discovered that much of the vacant land in the neighborhood had been the site of cave-ins at some point over the last hundred years, as the fragile Mill Creek sewer gave way below. (Some of these, such as the 1961 cave-in that claimed a hundred homes, were severe.) Spirn had drawn some tentative connections between the cave-ins and the demographics, and it raised questions about those buildings still standing and inhabited. Were the residents of West Philadelphia living above a time bomb that,

"You're never far from landscape," says Spirn.

with each rain, gradually worsened? Together with a small group of residents, she decided to do a house-by-house survey as a pilot study.

In some places it's fairly clear that West Philadelphia has a water problem. On a casual drive through the neighborhood, Spirn pointed out several blocks where the houses had sunk five feet or more. At one, the residents were parking their cars along an alley that ran behind the row of houses, because each house's garage was now six feet below grade. So Spirn and her researchers went door to door asking to look at people's basements in order to get a very detailed, behind-the-scenes understanding of the problem and its extent. They found numerous water-damaged houses with cracked and tilting foundations. The problem was pervasive throughout the floodplain. But what surprised them was what they found in the upland areas. As a test case they chose one block well above the floodplain to use as a baseline against which to judge their data, figuring there would be little damage here. As Spirn tells the story, one homeowner was overjoyed that the team had arrived. "I have lots of problems with water," he said as they entered. Down in the basement, Spirn was astounded at the humid, moldy conditions. On the floorboards of the first floor there was extensive rot. And then, as she worked her way to the far end of the space, she spied something



THE RESEARCH TEAM from summer 1999 outside a Mill Creek house. Spirn, second from the left, included residents in a house-by-house survey of the neighborhood, observing extensive decline.

compounding the problem. The damage here was just as bad as what she had seen in the floodplain.

After thirteen years, the West Philadelphia Landscape Project has created a far-ranging body of knowledge about a specific place. What it has revealed at every step is that landscape is a product of diverse forces. With this latest discovery, Spirn points to a web of complications that have conspired against homeowners. Starting with "redlining" by banks in the 1940s, which made home loans impossible, a pattern of deferred maintenance was developed, which was then passed along to inheritors of property in a vicious cycle of continued neglect. To break that cycle, however, will require more than just a professor pointing out an errant drain spout here or bad grading there. Spirn believes that residents have to develop a way to see and understand their neighborhood on every level, from the (Continued on Page 82)

PERSPECTIVE: Mark Cameron, ASLA

Who would have known, ten years ago, what driving around vacant lots would lead to?

I was fortunate to work with Anne Whiston Spirn for two years as a research assistant and project coordinator during the first phase of the West Philadelphia Landscape Project (WPLP). This work was my first venture into landscape architecture and community design, and would subsequently shape my own career path.

Looking back on my experiences in the project (especially through my own attempts to translate aspects of this project to Baltimore, where I now live), I realize that it was more than a research project; it was a different way of practicing landscape architecture.

The WPLP focused on knowing a great deal about a single geographic area. It emphasized the sharing of information that linked top-down and bot-

tom-up implementation. It created partnerships between institutions, communities, teachers, and students. Finally, it followed a methodology that allowed new discoveries and failed projects to enrich its overall vision. Working on the



WPLP expanded my ideas about the role of the landscape architect as well as the role of landscape architecture education.

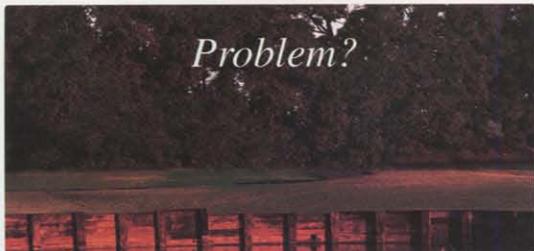
These lessons are not easily transferrable. The WPLP is very idiosyncratic, determined by its place as much as

by the driving force of Anne Spirn. Strong partners like Philadelphia Green and the Center for Community Partnerships are not always present in other venues. Additionally, the economic, social, and educational problems that face West Philadelphia (and, similarly, Baltimore) can be overwhelming and can make a few community gardens seem unimportant.

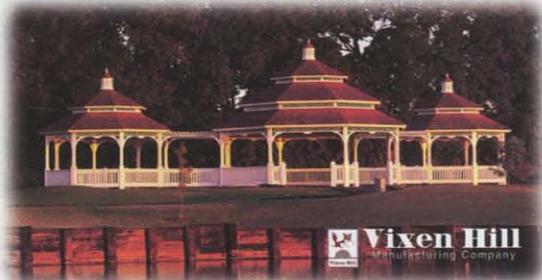
Baltimore is not West Philadelphia, and I am not Anne Spirn. However, I feel that, in a small way, the community design projects that my students at Morgan State and I undertake carry on the lessons that I learned ten years ago. Perhaps this is just another phase of the project.

Mark Cameron, ASLA, is coordinator of the Graduate Program in Landscape Architecture at Morgan State University in Baltimore.

Problem?



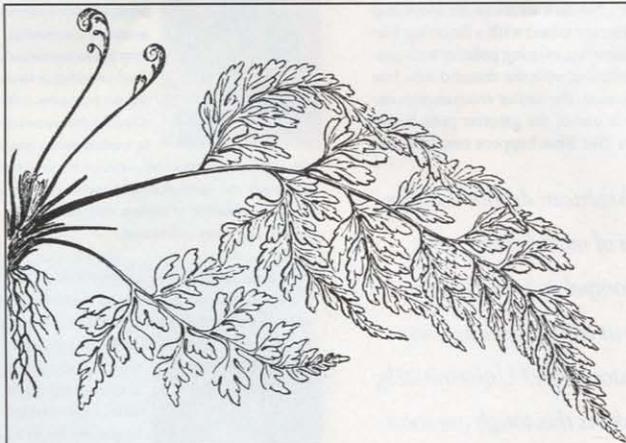
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Landscape Organism

(Continued from Page 71) natural to the historical to the social to the entrepreneurial.

Spirn calls her work "action-based research." Unlike pro bono work or philanthropy, the West Philadelphia Landscape Project takes as much as it gives. Every new iteration is designed in some way either to further Spirn's own research or to educate her students, and usually both. At the same time, the work that they are doing has had a remarkable effect on the landscape of West Philadelphia. Besides the twenty new gardens built earlier in the decade, Sulzberger Middle School has been radically transformed. In the past few years the work has become organismic as it spreads. Several other schools have begun to use the curriculum, adapting it to their own specific place.

Working with the residents in Mill Creek, Spirn hopes to do the same thing: educate a handful of people about the way their neighborhood is designed and has evolved over time, and encourage them to proselytize their neighbors. She expects various results, from the most grassroots street beautification effort to large-scale built works. As a landscape architect, Spirn can't help but judge the program in those terms. And she's currently working on a grant proposal to design and build a network of wetland parks across West Philadelphia that follows the course of Mill Creek. These would retain water on the ground level, reduce the amount of water running through the sewer, and hopefully reduce combined sewer overflows in the Schuylkill River.

But on a more philosophic level, she says, the real success has been in opening people's minds—hers, her students', and the people of West Philadelphia—to the resources that this place has to offer. On the ground level, in the neighborhoods of West Philadelphia, this will have the effect of creating what she calls "social capital," or a belief among residents that they can change their community for the better. Measuring the progress of such social capital is difficult but not impossible. Just take a walk through the local middle schools or visit with neighborhood residents at the community coalition. You can see it in their enthusiasm. **LA**

For more information, visit the West Philadelphia Landscape Project web site at www.upenn.edu/wplp.