Searching Out the Lines

Whether or not we acknowledge them, the lines do exist. Some lines are man-made, like the grid of an eighteenth century city. Others are formed by natural processes, like the river carving its path as the hills around it deposit their waters. Other lines are imagined or experienced, such as the route that, in one's mind, links home and school. Still others are invisible, covered over, rejected, forgotten.

In West Philadelphia, such a line exists. Invisible to most, the line of Mill Creek - buried in a sewer pipe - makes itself visible to the careful observer and to the occasional victim. Vacant lots, cracked walls, pools of water, flooded basements are signs of a natural process that continues below ground. The story of Mill Creek reminds one that city and nature are inseparable. The city exists within the natural world - is a creation and an extension of it. Ignoring natural processes or attempting to subvert them, as with the burial of Mill Creek, leads often to disaster.

This proposal, created through a graduate course called The Power of Place in MIT's School of Architecture and Planning, is an effort to make visible the line of the Mill Creek and to reinforce the relationship between the built environment and natural processes.
Tracing the Lines

University of Pennsylvania students working with Sulzberger Middle School classes taught students about the Mill Creek and its history. Afterwards, they asked the students to draw a map of West Philadelphia. Many of them drew images similar to that above -- the four key lines being the Schuylkill River at the right, the strong horizontal of Market Street, the diagonal Lancaster Avenue, and the newly rediscovered Mill Creek.
In the Mill Creek neighborhood, a vacant lot two city-blocks wide is taken over by trees and grasses. Looking carefully, you find a fire hydrant in the middle of this untamed grove. We often think of nature as something that is missing from the city. Sulzberger Middle School students are annually bussed out to a suburban nature preserve to see many of the same species that grow around a fire hydrant a block away from their school. At the same time, more catastrophic results follow when we forget that natural processes occur in the city. Over the past century, cave-ins throughout the Mill Creek neighborhood have been caused by water damage. Although Mill Creek has been buried in the city's sewer system, the topography of the land continues to move water along this path. Earth settles, basements flood, walls crack, houses and streets cave in. The fire hydrant in the grove of trees reminds us that city and nature are integrated in one system (or a series of interlocking systems). The map shows the Mill Creek neighborhood. Note how the vacant lots reveal above ground, the buried line of Mill Creek.

This proposal is an effort to make Mill Creek Visible in order to:
1. prevent more water-related catastrophes
2. find ways to deal with runoff that are more environmentally sustainable than the current system (in which all rain water must be chemically treated along with sewage)
3. reinforce the importance of natural processes and our role as humans in the natural environment
4. create a connection between the Mill Creek neighborhood and other areas of the city through the shared asset of the Mill Creek.
Experiencing the Lines

A quirky, episodic path might be hard to follow. It may appear at times and disappear at others. What will it be like to experience the path?

Seasonal Change

Though the connection from site to site will be subtle, one that is noted over time rather than right away, at certain times it will be more immediate. The red maples and related plantings will create moments of scarlet intensity during the early Autumn. Again in spring, the early presence of their red buds will create an almost pink haze around the trees. These brief times of the year are easy to miss. Yet, once you become aware of the red maple's color, it is difficult not to notice. The path will then be a seasonal celebration of the Mill Creek. These discrete moments of drama would cyclically force awareness a couple of times a year, rather than fading into memory after the initial excitement.
Community Participation

Community organizations could play a critical role in developing, maintaining, and celebrating the Mill Creek Path. Churches, schools, community gardens, non-profits, and others interested in community development and neighborhood issues could be stewards of these sites, helping to bring together people to care for them. Because these groups already have constituencies and, as a result, can organize groups, they are ideally suited to sponsor design charrettes, construction days, and regular events to celebrate the path. The image above shows gardeners and students at the Aspen Farm Community Garden in Mill Creek working together to improve the garden. Organizations such as these often have experience organizing annual events, another way to reinforce the experience of the Mill Creek Path.

Annual Events

Different kinds of annual events could be organized to observe the Mill Creek Path. One idea is to hold an annual tour of Mill Creek, from its headwaters to Bartram's Gardens. Much like the historic house tours that some communities hold, this would be a longer version (requiring automobile or perhaps bicycle, bus or trolley transport along the way). Sulzberger students were taken on a similar tour by Penn students and were amazed to really see water flowing through the creek. Having participated in such a tour only once will give individuals an entirely different perception of the path.

Either as a component of such a tour, or as an independent activity, groups that act as stewards for the sites on the path could hold a day of events at each site. Craft fairs, potluck picnics, garden parties, neighborhood cook-outs, garden shows, street fairs -- any number of events could be held. They might be held at several sites on one day, with invitations to travel from event to event. Or they might be held in succession, one on each Saturday during the summer, for example. The opportunity to involve different neighborhoods, a diversity of people, and many kinds of activities is great. Student projects could be integrated, as well, through presentations, theatrical productions, and art exhibitions, to name a few. The possibilities are endless!
Curriculum Ideas

The Mill Creek Path will extend from the grounds of Sulzberger Middle School out through the city to its other anchors. Ideally, the path will give the neighborhood, and particularly the students, a sense of ownership of that link and a sense of relationship to a greater part of the city. One way that this might occur is through the use of these sites in their education. Teachers could take part in thinking creatively about how these spaces might aid them in teaching. Science is clearly a subject that could be taught in these places, as is history. However, the ideas generated here deal more with Art and English, subjects which are less often related to the natural world at least in K-12 education.

Art classes could easily be taught along the path. Drawing plants, scenes, shadows, shapes, and other images. Students could be asked to make "paintings" using color from items they find on these sites (stones, leaves, soil, water, pollen, petals, etc.).

Temporary artworks could be explored endlessly, not unlike the methods used by Andy Goldsworthy of putting together compositions from plants, stones, string, and water. Many other possibilities exist to explore these ideas, and to look at the relationships between art and science through the study of plant forms.

The writings of Thoreau and of Emerson could be in relationship to these sites, encouraging students to look at nature first hand and even to see that they are surrounded by nature. There are many opportunities for teaching and examining poetry and encouraging students to compose their own pieces by observing "poetry" in the landscape itself. Many writing exercises could be constructed around these sites. For example, the concept of narrative could be introduced and explored through the narrative of the path. Students could be asked to make up a narrative about the path or about a particular moment along it. They could be asked to write stories set in these places; discuss the role of setting in stories; discuss the different uses of nature as a setting in stories (horror, serenity, escape, etc.); examine how they feel sitting in a grove of trees and how that might be similar to or different from a particular fictional character's description of sitting in a grove of trees. Language could be taught outside as well. Using examples in nature and in these sites, concepts of metaphor, simile, irony, and others could be explored in a non-traditional way.

There are clearly many more possibilities. Hopefully instructors at the many schools along this path would use it to engage their students in new and exciting ways. Bringing students outdoors on rare occasions can be difficult, but regularly incorporating the outdoors into curricula could increase student interest and involvement, help engage "non-traditional" learners, and provide a more meaningful education.