Fig. 1: Canada – Location of Lake Ontario. (*Source*: Government of Canada).
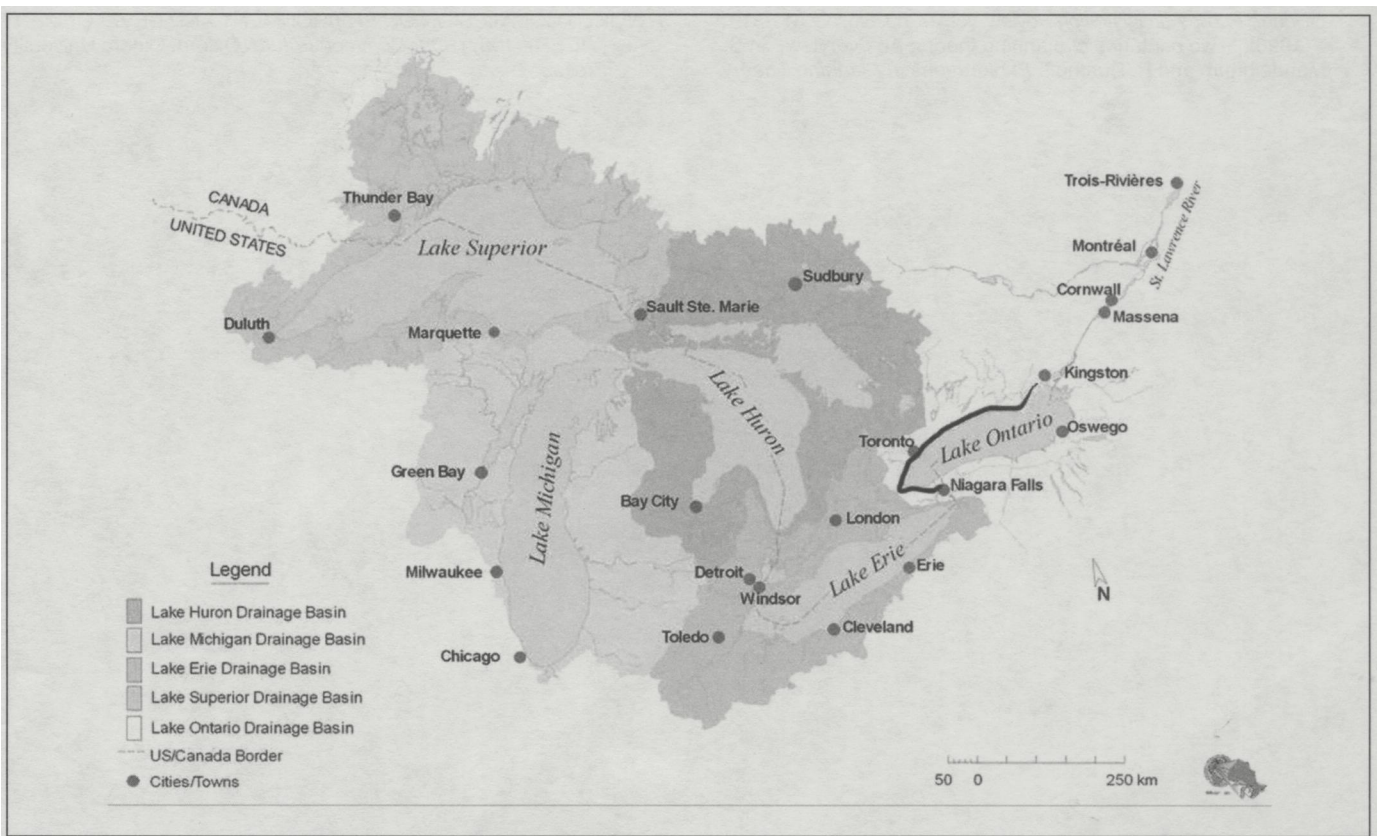

Fig. 2: Location of the Lake Ontario Waterfront Trail (black line) within the Great Lakes Drainage Basin. (*Source*: Environment Canada).

The Lake Ontario Waterfront Trail, Canada: Integrating natural and built environments

Ingrid Leman Stefanovic

Introduction

Years ago, famed anthropologist Margaret Mead noted the irony of our conceiving of beehives and fox's dens as natural and yet, when it comes to cities, we define them in opposition to nature. As we reflect upon the genuine meaning of sustainable development, we should recognize that the theoretical division between the natural and urban is counterproductive. The safeguarding of our natural environment is increasingly affected by the need of modifying urban behavior, and the enhancement of healthy human settlements cannot proceed in the absence of an integration and preservation of nature within our cities.

In Canada, there has been a significant effort in recent years to advance an ecosystem approach to planning, acknowledging the link between environment, community and economy. Of particular significance has been the work of the Royal Commission on the Future of the Toronto Waterfront. Their aim has been to develop an urban waterfront that would be "clean, green, useable, diverse, open, accessible, connected, affordable and attractive."[1]

The Waterfront Regeneration Trust was founded in 1992, in an effort to put these ideas into practice. Their *Lake Ontario Greenway Strategy*, published in 1995, argued for the need to protect the physical, natural and cultural attributes of the area through inter-governmental cooperation; to encourage community-driven restoration activities; to promote economic activities; and, finally, to promote greater awareness, understanding and recreational use of the waterfront.[2]

The award-winning Lake Ontario Waterfront Trail is the product of these efforts. Weaving its way for over 350 km from Niagara through downtown Toronto to Trenton, it passes through 27 cities, towns and villages; 177 natural areas; 143 parks and promenades; 80 marinas and hundreds of historic areas, art galleries and museums along the northern, megalopolitan shore of the lake. In many ways, it is an exemplary instance of a natural/urban synthesis, linking suburbs, skyscrapers and pastoral, rural landscapes (figs.1 and 2).

For the past three years, we have been involved in a research study at the University of Toronto, investigating evaluative images of the Lake Ontario Waterfront Trail.[3] The trail has been open since 1995, with gradual improvements and increased linkages continually in development. Some studies have been completed by the Waterfront Regeneration Trust to investigate meaningful places along the trail, but little has been done to explore peoples' values and perceptions of the trail. Unless we better understand how people perceive and appreciate their dwelling places, we will fail to comprehend the very foundation of their behavior – both positive as well as negative – towards the environment.

For this reason, we have undertaken a number of different initiatives, all aimed at uncovering taken for granted assumptions and affective ties to natural places like the waterfront trail. Twenty-five "end-to-enders" (those who have bicycled or hiked the trail from one end to the other) were interviewed and transcripts have been analyzed in detail. The principal investigator and her research assistants have also travelled parts of the trail, and one assistant has journeyed along its entire length, maintaining a journal of experiences and perceptions. We have hiked portions of the trail with children between the ages

of 11 and 14, and they have prepared photos, drawn pictures, written poems and essays to reflect their visions of what nature in the city ought to be like.

In all cases, a qualitative, phenomenological approach drove the project. Before I describe each set of findings, let me say a few words about the reasoning behind the methodology.

Benefits of a qualitative approach to understanding human values

While there are many advantages to employing quantitative methods in social science research, there are drawbacks as well. Standardized questionnaires, for example, compile numbers that can be impressive but, frequently, they leave out much detailed information that simply cannot be accounted for within pre-structured lists of questions and ratings.

As Canadian planner Hok-Lin Leung correctly points out, "the standard questionnaire survey ... can only entertain answers that are couched in terms of yes or no. It does not allow answers such as 'yes and no' or 'it depends' ... The question-and-answer technique may be of value in determining favoured detergents, toothpastes and deodorants, but not in the discovery of men and women."[4]

There is also a risk that the researcher's own concerns inadvertently influence the responses through the questions that are asked and, thereby, peoples' values and beliefs are not authentically heard but instead, are bounded within preconceived frameworks. Since the object is, presumably, to engage in a genuine listening of other peoples' views, the fundamental objective of these questionnaires is compromised.[5]

Phenomenology takes a different approach. Its founder, Edmund Husserl, described the aim as returning "to the things themselves" and this description was reiterated by his student, world-renowned philosopher Martin Heidegger.[6] Rather than constructing abstract, speculative theories about the world, their call was for a renewed appreciation of the lived world, as it appeared, prior to analytic constructions of meaning. Despite their different methods, both thinkers understood the importance of exposing taken for granted assumptions, and avoiding the contrived imposition of categories of meaning and preconceived frameworks in their philosophical analyses of ways of being in the world.

That same reluctance to impose our own values and to encourage each speaker to spontaneously speak to "the things themselves" as they had interpreted them along the trail, drove our interview process of end-to-enders. Our approach was to use a minimal set of questions to invite spontaneous narratives and discussion. We wanted to know, for example, where along the trail each interviewee might take a friend, if only one visit were available. Another question asked for single-word descriptors of the trail as a whole. Overall, people were made to feel sufficiently comfortable to share their stories with us in a loosely structured interview process.

Each interview lasted from one to two hours. Several days after the interviews, transcript summaries were returned to each end-to-ender for their comments. Twenty-three interviews were completed, drawing on an initial list provided to us by the Waterfront Regeneration Trust. The interviews were then coded and analyzed, using the NuDist4 (Non-numerical, Unstructured Data Indexing Searching and Theorizing) computer program for qualitative data analysis. The categories of descriptions of the trail that emerged in these analyses were not imposed in advance by the researchers but, instead, arose from the overlapping themes that were identified in a synthetic overview of all twenty-three interviews.

Our own research assistant and former philosophy student,

Mat Wohlgemut, was also charged with the task of travelling the trail to engage in a phenomenological "reading" of place. The aim was not only to catalogue his explicit perceptions of place, but to deconstruct some of the implicit values and assumptions that affected those perceptions. He journeyed in different seasons – biking, hiking and sometimes cross-country skiing – and kept a log and photos of his reflections and experiences.

Finally, a phenomenological approach drove our work with children. Our interest was not to survey and quantify children's views but, rather, to elicit their own, individual perceptions and recommendations regarding the trail, as well as to hear their views on how the natural environment ought to be cared for within our human settlements. Rather than compile statistical comparisons, the object of our work with children was to hear their stories in the hope that they might see things and articulate unique ideas that adults had missed.

In all cases, our approach was to engage in an intensive, thoughtful disclosure of taken for granted values and perceptions of complex landscapes, rather than an extensive, quantitative cataloguing of narrowly defined, preconceived interpretations of place. Let me briefly describe some of our findings.

The value of the Trail: Insights from the "End-to-enders"

In our comparative analysis, coding and final, synthetic overview of the interviews with end-to-enders, a variety of descriptions of the Lake Ontario Waterfront Trail clearly emerged. Data naturally fell into thirteen categories: value or meaning of the trail as a whole; nature of the experience of water and the lake; notable places and geographical locations; list of liked places; list of disliked places; kinds of positive experiences; types of sites; types of trail experience; types of liked places; types of disliked places; answers to specific questions that were asked during the interviews; comments on local people/communities; and final recommendations.

Under each category, numerous sub-categories were identified, helping us to focus on specific descriptors arising through the interviews. The number of people interviewed who had something to say about each of these descriptors was noted on thirteen, separate tables. All of these categories and sub-categories emerged from our coding and computer analysis of the *original interviews themselves,* rather than on the basis of any pre-conceived, theoretical representation. An example of a few of these tables is offered in figures 3, 4 and 5.

How did people perceive the value of the trail as a whole? Links were frequently made between the trail and a sense of being *at home.* "You can get in your car or walk to the area, and meander for a while," reflected one end-to-ender, "and it doesn't take you all day to get there." The proximity of the trail to their own, urbanized communities was highly significant. "It's here," remarked another person, "and it's at home." Several people pointed out how happy they were to avoid traffic heading up to cottage country (a regular, weekend pastime of Ontarians!) to enjoy instead a leisurely, pastoral setting within such close proximity to their own neighborhoods.

That sense of being at home was hardly incidental. Attachment to place and a sense of the importance of protecting one's home can be essential components when it comes to environmental preservation. More than a mere sentimental emotion, that sense of attachment is fundamental both to conserving the natural world but also to ensuring that humans maintain a sense of belonging and attachment to their home bases. That the trail was able, in some measure, to speak to that sense of importance of being at home is a major accomplishment of its design.

306

Clearly, the water itself was a huge attraction to all end-to-enders. That strong pull of the water again indicated to us much more than a narrowly conceived "aesthetic" or sentimental draw. In our view, it articulated what we perceived in the end to be a *primordial right of access to-the water* by the public. Many philosophers from both Eastern and Western metaphysical traditions have recognized the essential significance of water as a primal element. In this case, the water defines the experience of the trail and, perhaps more importantly, serves as a fundamental reminder of the originary importance of dwelling alongside a lake of such size and beauty.

"Being by the water – you can't beat it," commented one interviewee. End-to-enders Ken Hughes and Mickey MacDonald mused how "Lake Ontario is the smallest of the Great Lakes but still, it's huge ... If I planted you there and you didn't know where you were, you'd have trouble distinguishing whether that was Lake Ontario or the Atlantic Ocean. The sea has a smell for sure but, at first glance, all one notices is the water itself."

A number of travellers complained about portions of the trail that left the lakeside, meandering through communities separated from direct beach access. They would watch for stretches of water that appeared through breaks in the built-up portions of the trail, and orient themselves in terms of the distance remaining before returning to the lake. Many complaints were voiced about those areas of the trail where the lakefront was absent from view. "That's what the trail *is* – a ride along the waterfront," remarked a hiker. Strong sentiments were voiced about the beauty and the elemental draw of the lake. "Its vastness," reflected an end-to-ender, "pulls my heartstrings."

Category 9: Types of liked places. Definition: A cross-referencing between the basic typology of places, and the mentions of places that were particularly enjoyed.	
Sub-category	**No. of People**
➤ Stopping places (e.g. lunch spots, or places to overnight)	8
➤ Places with Amenities	14
➤ Social or people places (e.g., busy parks or friendly towns)	7
➤ Scenic places or stretches (e.g., nice view of water, pleasant scenery)	6
➤ Places named as landmarks (e.g., Humber Bridge as gateway to Toronto)	2
➤ Industrial places (e.g., factories, nuclear facilities, etc.)	10
➤ Well-signed places	1
➤ Historic places (e.g., Old Oakville)	14
➤ Architecture & buildings (e.g., Victorian homes)	7
➤ Museums and Monuments	7
➤ Natural places (i.e. all places where nature is prominent)	22
➤ Natural or undeveloped setting	3
➤ Places with vegetation (e.g., treed places)	7
➤ close to, or view of, the lake (e.g., waterfront parks)	18
➤ Places to learn about nature (e.g., information boards)	4
➤ Wetlands (e.g., Rattray Marsh; Cootes Paradise)	15
➤ Conservation or regeneration areas	12
➤ Places to see fish and wildlife	11
➤ Ecologically destructive places (e.g., polluting facilities)	2
➤ Small towns and villages (e.g., Cobourg, Port Hope)	13
➤ Town and City parks (e.g., Victoria Park in Cobourg)	18
➤ Starting and ending places (e.g., Niagara-on-the-Lake)	1
➤ Designated off-road trail (e.g., Martin Goodman trail)	7
➤ Well-surfaced trail (e.g., paved, fine gravel, & similar)	6
➤ On-road stretches of trail	6
➤ Residential stretches of trail (e.g., through Mississauga)	11
➤ Urban stretches of trail (e.g. Downtown Toronto)	9
➤ Rural stretches of trail (e.g., Newcastle to Port Hope)	12
➤ Peaceful or remote stretches of trail (e.g., country roads)	6
➤ Stretches with a sense of linkage (e.g., Martin Goodman Trail)	1
➤ Detours or side trails (e.g., in order to get close to the Lake)	13

Fig. 4: Sample table compiled from End-to-Ender Interviews: Category 9: Types of liked places.

Category 8: Types of trail experience. Definition: Mentions of stretches of trail that can be said to be 'of a type', or to have a particular character, purpose, or effect.	
Sub-category	**# of People**
➤ Designated off-road trail (e.g., Martin Goodman trail)	13
➤ Well-surfaced trail (e.g., paved, fine gravel, & similar)	8
➤ Poorly designated trail (e.g., through Scarborough)	11
➤ Poorly maintained stretches (e.g., potholes or debris on trail)	4
➤ Poorly surfaced trail (e.g., sand; coarse gravel; mud)	7
➤ On-road stretches of trail	23
➤ Highly trafficked area (e.g., Highway 2)	22
➤ Dangerous or frightening (e.g., with no bike lanes)	13
➤ Good or OK bike lanes or shoulder (e.g., country roads)	6
➤ Bad bike lanes or shoulder (e.g., narrow, unmarked lanes)	3
➤ Low traffic stretches of trail (e.g., Countryside)	4
➤ Straight road (e.g., along Murray canal)	3
➤ Biking vs. Walking stretches of trail (e.g., Rattray Marsh)	16
➤ Difficult or steep stretches (e.g. hilly part on Kingston Rd)	7
➤ Busy stretches of trail (e.g., along Toronto harbourfront)	9
➤ Residential stretches of trail (e.g., through Mississauga)	13
➤ Urban stretches of trail (e.g. Downtown Toronto)	13
➤ Rural stretches of trail (e.g., Newcastle to Port Hope)	16
➤ Peaceful or remote stretches of trail (e.g., Orchard Grove Rd)	7
➤ Noisy stretches of trail (e.g., in urban or trafficked areas)	7
➤ Scenic stretches of trail (e.g., close to the lake)	3
➤ Boring stretches of trail (e.g., dull scenery; straight road)	13
➤ Lakeside stretches of trail (e.g., Toronto Waterfront)	14
➤ Stretches of trail far from the water (e.g., through Scarborough)	11
➤ Stretches with a sense of linkage (e.g., Martin Goodman Trail)	1
➤ Detours or side trails (e.g., in order to get close to the Lake)	18
➤ Stretches of trail to move through quickly (e.g., boring scenery)	6

Fig. 3: Sample table compiled from End-to-Ender Interviews: Category 8: Types of trail experience.

Category 10: Types of disliked places. Definition: A cross-referencing between the basic typology of places, and the mentions of places that were particularly disliked.	
Sub-category	**No. of People**
➤ Places with inadequate washroom facilities	1
➤ Unfriendly or private places (e.g., private property)	6
➤ Boring places or stretches of trail (e.g., no scenery)	12
➤ Industrial places (e.g., factories, nuclear facilities, etc.)	7
➤ Suburban places (e.g, urban sprawl)	2
➤ Poorly-signed or confusing places (e.g., break in the trail)	11
➤ Natural places (i.e. all places where nature is prominent)	5
➤ Wetlands (e.g., Rattray Marsh; Cootes Paradise)	1
➤ Conservation or regeneration areas	4
➤ Ecologically destructive places (e.g., polluting facilities)	3
➤ Starting and ending places (e.g., Niagara-on-the-Lake)	4
➤ Poorly designated trail (e.g., through Scarborough)	10
➤ Poorly maintained stretches (e.g., potholes or debris on trail)	3
➤ Poorly surfaced trail (e.g., sand; coarse gravel; mud)	3
➤ On-road stretches of trail	20
➤ Highly trafficked area (e.g., Highway 2)	19
➤ Dangerous or frightening (e.g., with no bike lanes)	12
➤ Bad bike lanes or shoulder (e.g., unmarked lanes)	2
➤ Straight road (e.g., along Murray canal)	2
➤ Places that are not bicycle-friendly (e.g., Rattray Marsh)	7
➤ Difficult or steep stretches (e.g. hilly part on Kingston Rd)	4
➤ Urban stretches of trail (e.g. Downtown Toronto)	3
➤ Noisy stretches of trail (e.g., in urban or trafficked areas)	6
➤ Stretches of trail far from the water (e.g., Scarborough)	9

Fig. 5: Sample table compiled from End-to-Ender Interviews: Category 10: Types of disliked places.

While the vastness of the lake and its spectacular beach vistas were essential to the trail experience, other aspects of the significance of water arose through the interviews. It was not only manicured, picturesque scenes of nature that attracted end-to-enders. The wildness of wetlands and marshes, as well as the proliferation of winding rivers and creeks that they

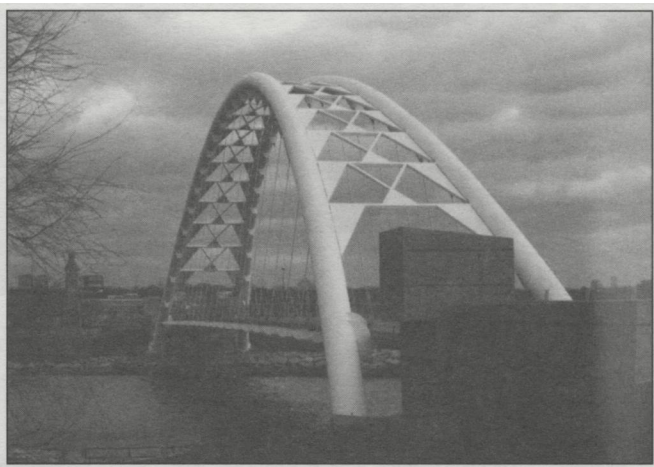**Fig. 6:** Rattray Marsh, west of Toronto. (Courtesy: M. Wohlgemut).

Fig. 7: Humber River Bridge. (Courtesy: M. Wohlgemut).

encountered, left strong impressions upon people. There was an attraction of the "undeveloped" areas – places where a mathematized sense of human ordering of the environment gave way to the spontaneous presence and grace of the natural world (fig. 6).

The spectacle of working canals also provided for a multifaceted experience of travelling the trail. The *interface* of water and built structures came up during our conversations in various ways: a bridge over the Humber River (fig. 7 and 8) provided for a dramatic sense of gliding *above* the water, and being sheltered at the same time by the geometry artistry of the cables and the soaring height of the built structure. The lake became much more than mere vista in these recountings, as end-to-enders reflected upon the historic, economic and ecological importance of their varied experiences of the water.

Also highly valued was the sense of *diversity* along the trail.
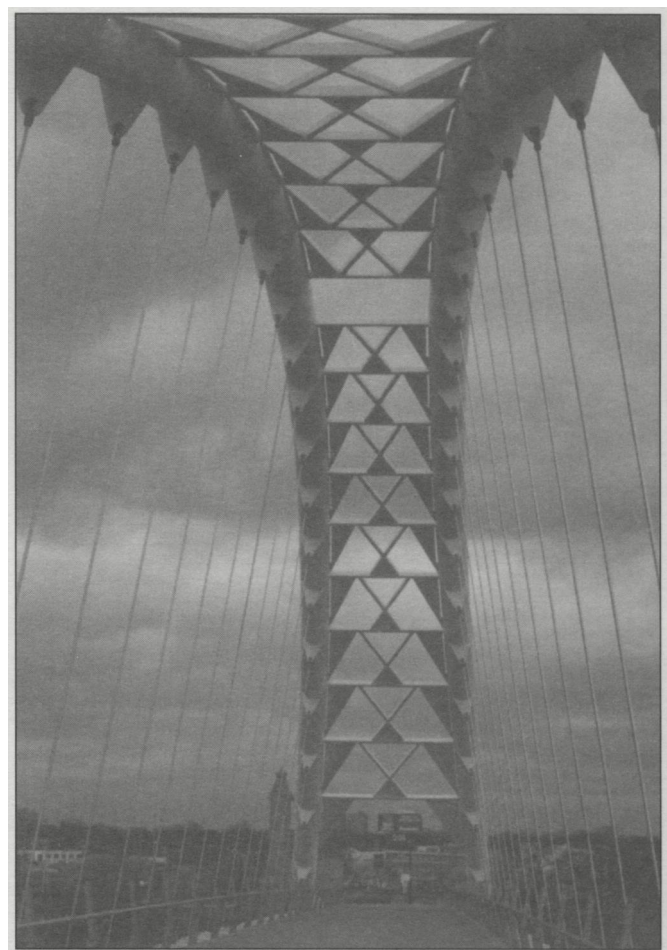

Fig. 8: Humber River Bridge. (Courtesy: M. Wohlgemut).

308

Fig. 9: Darlington Park and Nuclear Generating Station. (Courtesy: M. Wohlgemut).

"You could be in a marsh, a city, a cornfield, all in one day," remarked one participant. Interestingly, many people were drawn to travel this particular trail because they were hikers and bikers, used to wilderness and nature trails but fascinated, in this case, precisely by the *mix* of the urban and the natural. Certainly, the more undeveloped settings were popular among the end-to-enders but, at the same time, they appreciated the "social or people places," the towns and city parks, and the varied architectural landscapes as well.

Different sites that were experienced ranged from the industrial to suburban, from wetlands to historic landmarks, from the urban to the rural. From "stopping places" to "stretches to go through quickly;" from "noisy" to "boring stretches" of the trail; from areas of regeneration to ecologically destructive places, the sheer variety of landscapes remained as a strong memory among the end-to-enders. When prompted to describe memorable sounds along the trail, recollections extended from traffic noise to train whistles to the songs of birds, the wind and water lapping along the shores.

What kinds of places were liked and disliked? To no one's surprise, "natural places" were most appreciated, especially those close to the lake. Wetlands were popular, as were town and city parks, conservation areas and rural stretches of the trail.

However, the story is not quite so simple. Built-up areas were highly valued as well. A large number of people interviewed welcomed the urban stretches of trail, the historic architecture, museums and monuments and even industrial areas. Parts of the trail are *not* particularly aesthetically pleasing and yet a number of people found the *contrasts* between industry and nature to be appealing. There was also a sense of respect for industrial backyards as *working waterfronts* and even a sense of wonder as one passed the Darlington Nuclear Generating Station, surrounded by regenerated parkland (fig. 9).

As much as urban areas were appreciated, disliked places frequently included on-road stretches of trail, particularly in highly-trafficked areas. Poorly signed or confusing places were also high on the list of disliked places. Not surprisingly, people were uncomfortable in areas where they felt unsafe or disoriented. In our view, notions of safety and belonging point to primordial rights that must be respected and maintained by developers of the trail.

A huge amount of data was generated by these interviews. Overall, there was a sense that the Lake Ontario Waterfront Trail provided a unique opportunity for a *connected, continuous experience* of the lakeside, megalopolitan development while, at the same time, it revealed a large *diversity* of human settlement forms and natural settings. People welcomed this opportunity for a plurality of experiences, and the mingling of the urban and natural landscapes, all within easy accessibility from their homes. Recommendations ranged from supporting initiatives to bring all sections of the trail closer to the water's edge, to improving signage and trail surface, and raising awareness among the general public about the existence and assets of the trail. Today, in an era of specialization and fragmentation, the notion of *integrating* communities along more than 350 km. of trail and, at the same time, of interweaving *diverse*, natural settings within urban landforms is unique. According to the end-to-enders, such instances of vibrant, fitting placement between ecology and human settlements deserve to be protected and enhanced.

Towards a phenomenological reading of place

Both the principal investigator on this project, as well as each research assistant, travelled various portions of the trail. One research assistant, Mat Wohlgemut, was charged with the specific task of completing the entire journey from one end to the other, and maintaining a travel log. Collectively, many of our reflections converged with those made by other end-to-enders. On the other hand, our own journeys, undertaken with the specific, phenomenological task of deconstructing significant moments of the lived experience of travelling the trail, offered new possibilities of deliberating upon our identification of meaningful places.

All along the trail, we noted the competing interests of the water and the highway that follows and indeed constitutes major portions of the trail. "The noise and rush and experience of travelling on a roadside," writes Mat in his log, "was repeatedly contrasted with an experience of travelling along the water." The soundscape itself vacillated between the noise of traffic to the sound of the waves. In an important sense, this dual pull defined the essence of this trail that straddles both the natural and the urban worlds.

Mat identified a number of different relationships between the water and the land that evolved in his travels and that we see to be phenomenologically significant. Some areas provided for "an entryway" and *immediacy of access* to the lake. This was sensed along beaches and even along concrete walkways that straddled the shores and were low enough to allow for the experience of the spray of the waves as they hit against the barriers. (Mat writes: "Coronation Park: no barriers to the water. You can walk right in...")

Other areas provided for a more nuanced, "dialectical" relationship to the lake. Walking along boardwalks through a marsh, or over bridges, one hovers *over* the water – suspended above it, while at the same time, conscious of its nearness and full presence. Piers and spits provide for a similar interplay: one feels as if one is *on* the water, yet sheltered and protected by being bonded to the coast. It is not merely *water as spectacle, as vista* that attracts one to the lake – although that aspect can be alluring as well.

The point is that the human experience of being near the water is more complex than one might expect. In fact, there is a special revulsion that accompanies the occasions during hot, summer months when a proliferation of algae accumulates due to chemical pollutants in the lake and a potent stench permeates the beaches. At those times, one is repelled away from the water, at the same time that one lives the injustice of being denied access to what should be a pleasant experience of lingering by the shore.

Aside from the water/land interplay, another relation that emerged was between geometrical and more "wandering" places along the trail. At times, there is a strong sense of linearity of the sidewalk or road. When these stretches are long and uniform, they can be dull and uninviting, particularly for the hiker. "Space is suddenly geometrical," writes Mat, "ready to be translated into the time required to get to the stoplight." Space and time become point-oriented and, frequently, the destination becomes more important than the journey. If one is biking along these routes, one speeds through them, head down, as quickly as possible.

On the other hand, the curve of the beach or the wander of the path invite exploration, meditation and the experience of lingering. "A 'wandering path,'" Mat muses, "is both a path that moves and rolls with the contours of the landscape, and a path *for wandering*, free from a rigid structure and plan." Most of the time, such areas were inviting, as places of solitude, peace

and, in Mat's words, a "shift from the 'what's next' of progress through linear time, to the 'what's here' of being *present*." In these areas, one dismounts while biking, compelled by the environment to slow down. Mat's reflections here are instructive:

> The system of winding trails and boardwalks brought a kind of being-in that was distinct from the flat linearity of the highway. Instead of the tendency towards one axis of the imagination (straight forward), I am surrounded by, and asked to explore full three-dimensional space – above, below, in front, behind and all around me. Each field of interest is not presented as a flat surface (a façade) but as having texture and depth. Behind the first veil of leaves lie the branches, with their coarse and wrinkled bark, and beyond that another tree, with the promise that there might be a small path that could take you deeper, back there, where there seems to be a low rise. And what lies beyond that? A marsh? A treasure trove of fragrant, musky mushrooms? The visually-oriented cue of having 'layer upon layer' of perspective means that there are layers of *possibility* open to me. The 'mystery' is played out in the tension between what is hidden and what is revealed.

Marshlands that one encounters similarly shelter a "dense mystery" of wildlife, plants and layers of mud, reeds and algae. Untamed nature still rears its head in these moments, reminding one of the richness of the uncivilized. Planners must be reminded that these kinds of areas are essential to the meaningful human experience of nature in the city.

Another texture of possibilities arises in historical areas, where layers of meaning reveal a depth of past traditions. The old town of Oakville, west of Toronto, provides for a living experience of 150-year-old houses, as one meanders off the main trail through tree-covered streets adjacent to the lake. One moves more slowly here, drawn towards the past through a landscape of spatial and temporal contrasts.

Many of the end-to-enders, as well as each of us who have travelled the trail, have been drawn to specific landmarks as well. Architectural and environmental "monuments" help to define the journey. Whether it is the CN Tower looming in the distance or nexus points, such as Sheldon Lookout (fig. 10), particular places become *centers* of meaning and points of orientation. Kevin Lynch's famous elements of city images and legibility – identified as paths, edges, districts, nodes and landmarks – found some expression in the narratives of the end-to-enders and in Matt's reflections.[7] In our case, it seemed that special emphasis was given to districts or areas that had a particular character of their own, and landmarks that helped to mark the journey and define stronger memories (table 1).

Most of the end-to-enders travelled the trail during the spring and summer months, but Mat travelled year-round. In his journal, Mat writes how "it seems that weather ('atmosphere') is fundamentally disclosed along with a place, such that a place is unimaginable without its accompanying weather. Landscapes always have a sky, a sense of the air and the light, and the feeling of a season – one might be tempted to say that these elements go a long way to define the mood of an environment." Environmental psychologists, as well as some philosophers, have reflected upon the importance of weather when it comes to questions of mood and ways of being in the world. Clearly, the weather is hardly something that we can control but it is important to remember that its characteristics can help to fundamentally define the experience of place, and that places themselves can be revealed differently, depending upon the atmosphere and the weather. (Compare, for example, figure 11, a photograph of Ratttray Marsh west of Toronto, with figure 6, the identical spot in a different season).

Developing the trail by keeping a variety of seasons and weather conditions in mind seemed to us to be recommended. How do different trail conditions change with snow vs. summer conditions? Are there places where one can seek shelter dur-

310

Fig. 10: Sheldon Lookout, nearing downtown Toronto. (Courtesy: M. Wohlgemut).

Fig. 11: Rattray Marsh in spring. (Courtesy: B. Sexsmith).

ing storms or intense heat? These kinds of questions should be part of the planning process of these kinds of extended trails.

Low-density housing areas were found by us to be sterile and "interchangeable." Such "suburban wanders" with garden-style arrangements were described in Mat's journal as places that "could have stood in for one another quite easily." The anonymity of such areas affects the hiker particularly, since there is little to hold one's interest for any extended length of time. When one feels that the area that one is travelling through is not distinctive, one senses little progress or reward for the journey.

Overall, we found three groupings of places: the uninviting, inviting and "contested" places where feelings were mixed (table 2). As the end-to-enders did, we felt out of place in noisy, highly trafficked areas, or places where signage was not clear or lacking. "Utilitarian" environments were unwelcoming and ranged from long, anonymous stretches of road to linear, "master-planned" residential communities. Unapproachable, "blocked" places emerged as private neighborhoods where one was made to feel unwelcome. Mat found places of social inequity where income disparities arose to be particularly disturbing to him as instances of environmental injustice.

The inviting spots ranged from wandering, wilder, mysterious places like marshlands to conservation areas teeming with geese and fish; to vibrant urban centers like the Harbourfront area of downtown Toronto; to small town centers with their rich histories of place; to areas of immediate access to the lake. Solitary places could either be inviting or forbidding, depending upon the location. Other kinds of "contested" places were defined in terms of whether one was biking or hiking that particular part of the trail.

From winding country roads to wetlands and cities, the trail reveals many facets of an urban/nature dialogue. At the end of his travels, Mat reflects: "The line of my journey is written in the lines of my narratives: trails, factories, houses, suburbs, docks, harbours, nooks and niches, highways and byways and horse tracks, creeks and wetlands, forests, fields, bridges, cliffs, beaches, potholes, gravel, asphalt, dirty, lunches in the sun and the sometimes near, sometimes distant presence of the immense and immutable lake. This is, indeed, a well-storied trail."

Impressions of children

Our work with children is still underway although already we have spoken and hiked with children from five classes and compiled some of their impressions. Once again, the aim was not to quantify children's perceptions about nature but, rather, to see to what extent their impressions complemented or added to our work with adults. A major part of our work was to obtain their sense of what nature in the city *is,* and what it *should* be like.

Perhaps not surprisingly, to some degree, the nature/urban divide is already inculcated within young teens. Thirteen-year old Kathryn notes: "Nature in the city ought to be less urbanized ... The industrial aspects of the city took away the beauty of nature." Unaware of the environmental costs, the same girl felt that nature should be well-manicured within urban settings. "People should keep their lawns clean and mowed for the sake of the other people in the city; one unmowed lawn can ruin a whole street's beauty!"

Many children saw nature in terms of flowers and trees, and aesthetic descriptors frequently came up. Children were frequently perturbed by garbage, litter and pollution. "I would improve the garbage problems," wrote Jessica. "The garbage kinda [sic] wrecks the nature part of the trail because it wrecks the view."

At the same time, there was a strong sense of the value of preserving natural environments in some form. "Nature in the city is slowly dieing[sic]," wrote Jessica. She concludes: "As more houses and buildings are being built, nature is becoming more scarce. I think that it is good to have the Waterfront Trail so people who walk it get a good taste of the remaining nature."

Many children were bothered by the notion of environmental degradation and despoliation. Stephanie told us how she was "walking along the docks and I saw immense amounts of decaying, dirty algae and bacteria. There were actually many fish swimming in circles on their sides because they cannot function properly because of the tremendous amounts of pollution entering Lake Ontario. I don't think that I will ever be able to swim in Lake Ontario without worrying if I will get cancer."

Thirteen-year-old Tamara was upset by the impact of new housing developments on wildlife. "The only places which I find to really be disasters are new developments such as ... the "French Country Homes." In many of these types of cases, forests are completely wiped away and this is done unnecessarily. Even if houses were planned to be built," she concludes, "it isn't mandatory to get rid of everything natural." In her later reflections, she referred to such places as "evil suburban developments!"

Most of the children enjoyed the trail the most, in areas close to the lake. We enjoyed watching where they played spontaneously or lingered longest. Throwing stones onto the lake was a favorite pastime, as was scrambling along the rock jetties (fig. 12). Simply watching how much time children spent playing upon these jetties drew our attention to the popularity of piers and spits along the trail. All of these places that extend *onto* the water provide for a special adventure of interacting with the lake in a more enriching way than as mere spectacle.

In almost every case, the children's recommendations were to ensure that the trail remained close to the water. As thirteen-year-old Nicola wrote, "nature in the city ought to be closer to the lake ... Much of the Waterfront Trail is along Lakeshore Road and not, actually, along the lake. It is nice to have houses built next to the lake, but I think it is more important to have a nice trail for people that[sic] can't afford housing by the lake."

The wide range of data collected about children's perceptions ranges from drawings to photos, and even to GIS maps, generated by the Grade 9 class at St. Mildred's-Lightbourn School in Oakville (fig. 13). By clicking on the items blocked on the map, one can survey each child's evaluations and explanations as to why a photograph was taken at a particular spot. Much work remains to be done to fully investigate this data but already it is clear that children have much to contribute to our understanding of the meaning of a waterfront trail, and the interface between the natural and built environments.

Conclusions and recommendations

Primarily based on the work with end-to-enders and by virtue of travelling the trail ourselves, we have evolved numerous recommendations that will be forwarded to the Waterfront Regeneration Trust for their consideration. The City of Toronto Planning Department has also received our report in response to their invitation to prepare recommendations specifically relating to the portion of the trail that runs through the downtown, lakefront area.

While the recommendations are numerous and, in many cases, site-specific, a number of them are more generic and provide some food for thought for anyone interested in developing more natural cities. Some of these suggestions include the following:

Table 1
**The Lake Ontario Waterfront Trail: Physical, geographical designations**

Nodes and landmarks	Regions and districts	Paths and roads
Lakefront parks	Suburban	Country roads
Cemeteries	Urban	Trans Canada Highway 401
Tourist attractions	Rural	Lakeshore Road #2
Downtowns	Conservation areas	Motel Strip
Small towns	Marshlands/Wetlands	
Lakefront promenades	Industrial backyards	
	Agricultural	
	Beaches	

Table 2
The Lake Ontario Waterfront Trail: Experiences of place

Experience	Place
Un-inviting Places	Highly trafficked
	Unsigned or poorly signed places
	"Utilitarian," efficiency-oriented places
	Unapproachable, blocked places (e.g. areas of private property, like Wilmot Creek)
	Invented, "master-planned" and "branded" places
	Dusty, uncomfortable places
	Noisy places
	Long, anonymous, linear/geometrical stretches
	Inequitable places (income disparities)
Contested Places	Marginal places
	Unexpected places
	Solitary places
	Biking vs. Hiking places
	Points of intersection of "worlds"
Inviting Places	Meandering/wandering places
	Natural stops/resting places
	Elevated places (above roadways or water)
	Wild places
	Places identified with wildlife (geese, fish, birds)
	Vibrant, urban places
	Vistas
	Liberating places, with clear, waterfront access
	Quiet, peaceful places
	Significant landmarks
	Complex (historical and environmental "layering") places
	Dramatic places
	Historical places
	Working waterfront
	Lingering places
	Invisible functions of place (hidden maintenance needs)
	Mysterious places (marshes, etc.)
	Easy-flow places
	Wooded places
	Well-signed places
	Diversity of place/sense of discovery
	Beginning and ending places

Fig. 12: Grade 6 children on rock jetty, Mississauga, west of Toronto. (Courtesy: B. Sexsmith).
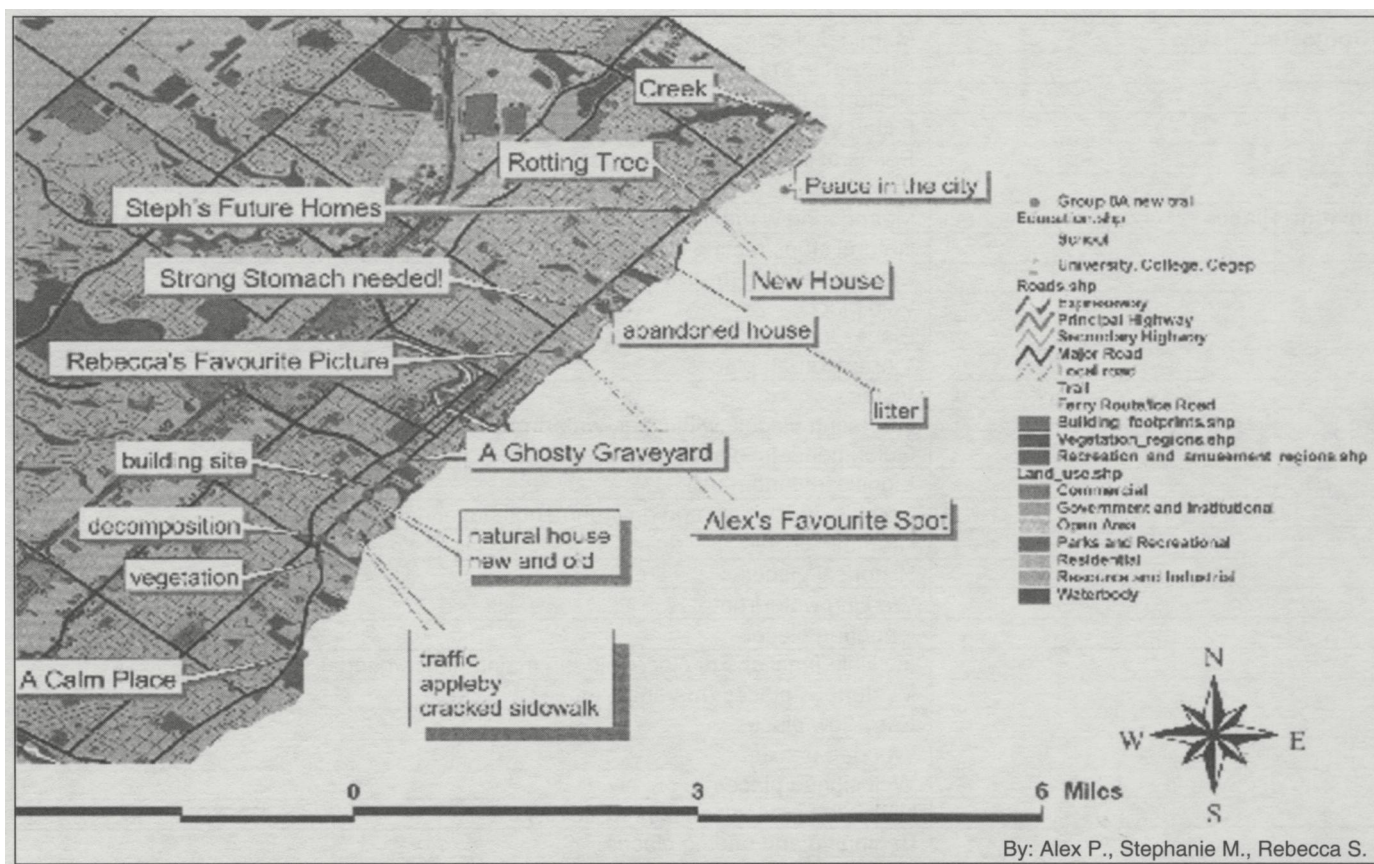
Fig. 13: Sample GIS map, compiled by Grade 9 students of St. Mildred's-Lightbourn School.

- **Ensure that the trail is easily accessible as a public amenity** for people of varying abilities, incomes and ages. Inter-modal transportation systems should ensure comfortable access to the trail entry points.
- **Preserve diversity**. Recognize that, in addition to manicured walkways, people value when layers of history and ecology are evident. Even industrial areas can have their charm.
- **Ensure that private developments do not block visual and physical access to the lakefront.** Interaction with the lake is a primordial right of all citizens.
- **Keep the trail away from traffic, whenever possible.**
- **Route the trail as close to the lake as possible at all times.** Have a long-term expropriation plan to ensure proximity to the lake of the dedicated trailway.
- **Preserve the mystery of the "untamed."** Efficient, master-planned designs frequently provide for well-manicured environments but deny the complexity of our environments. Finding ways to preserve "untamed" nature rather than to merely create utilitarian spaces is a major challenge to future development of the trail.
- **Think non-geometrical.** Long, anonymous stretches of trail are tedious. Wandering trails – and even alternate routes – provide people with a choice as well as more opportunities to linger and to enjoy a richer experience of place.
- **Provide for resting/lingering places:** Nodes that invite the visitor to stop and reflect on his or her surroundings are an important part of providing for a sense of place. Such nodes can be defined by benches, water fountains, shaded areas under treescapes, larger seating areas and other similar stopping places where one is not required to be a consumer but simply can slow down to admire the lake and the surrounding landscape.
- **Build on local histories of place and existing landscapes.** Mapping out local histories, narratives and stories from citizens and recognizing the opportunities that are revealed for design that arises *from* the landscapes rather than being *imposed upon them* are ideas of central importance. Both ensure more responsible and, eventually, sustainable design.
- **Protect and create greenspaces and parks along the waterfront**. Virtually all groups whom we interviewed valued nature highly and wish to integrate much more frequently wild and built environments in our cities.
- **Find ways of encouraging *diverse* relationships to the water.** Piers, spits, bridges, small waterfalls and fountains, ponds, rivulets, creeks, marshlands all engage us with the water in different ways. People love the water. Ensure a rich and diverse experience by imagining ways in which one can be with the waterfront: above it, on it, as well as appearing as beautiful vista.
- **Create new experiences for nature and wildlife experiences.** Birds, fish and animals are intriguing and people mourn sterile environments where local species are at risk.
- **Create legible spaces through discerning physical features of design**. The need for a sense of direction and orientation is fundamental. However, just placing signs to orient people is aesthetically displeasing and depletes the experience. Finding ways to guide people through physical design – different trail surfaces or placement of landmarks, for example – helps to maintain a sense of belonging with decreased

environmental stress.[8]
- **Design acoustically pleasing environments**. We tend to forget the importance of sound, both as environmental stressor as well as a source of peaceful sense of place. Finding ways to decrease the noise of traffic – moving water is excellent – is important to the future design of the trail.
- **More actively promote the trail.** Efforts should be made to raise awareness about it in the general public, the schools and in the communities along its length. Some plaques or other ways of communication should be found to ensure that people who are on the Lake Ontario Waterfront Trail are aware of its existence as a unique, pedestrian link between Niagara and Trenton.

Finally, we felt that it is important to indicate to local communities through signs or plaques that they are part of a 350-km. long stretch of trail, linking a megalopolitan settlement form that straddles one of the largest lakes in the world. Too often, we forget that we belong to many different scales of settlement, from neighborhood through city to megalopolis and, ultimately, to Ecumenopolis and a living planet. A development such as the Lake Ontario Waterfront Trail serves to remind us of the importance of linkages between natural and built environments, as well as between built and ecological communities of varying scales. Such reminders are rare but deserve to be highlighted to serve as a guide in the future planning of cities worldwide.

Notes

1. S. Barrett, *A Decade of Regeneration: Realizing a Vision for Lake Ontario's Waterfront* (Toronto, Waterfront Regeneration Trust Corporation, 2000), pp. 4-5.
2. See *The Lake Ontario Greenway Strategy* (Toronto, Waterfront Regeneration Trust Corporation, 1995).
3. The study has been funded by the Social Science and Humanities Research Council of Canada (SSHRC). Research assistants were: Mat Wohlgemut, MA (Phil.); Richard Oddie, Ph.D. candidate at the Faculty of Environmental Studies, York University; Sarah King, Ph.D candidate at the University of Toronto; and Lois Lindsay, MA (Geography).
4. See Hok-Lin Leung, *City Images* (Kingston, Ontario, Ronald P. Frye & Company, 1992) pp. 5, 7. For more discussion on this idea, see also chapters 3 and 9 of my own *Safeguarding Our Common Future: Rethinking Sustainable Development* (Albany, NY, State University of New York Press, 2000).
5. For more information on qualitative research, see John W. Creswell, *Qualitative Inquiry and Research Design: Choosing Among Five Traditions* (Thousand Oaks, CA, Sage, 1998) or Steven J. Taylor and Robert Bogdan, *Introduction to Qualitative Research Methods*, 3rd ed. (New York, Wiley, 1998).
6. See Edmund Husserl, *Ideas Pertaining to a Pure Phenomenology and to a Phenomenological Philosophy*, trans. F. Kersten (The Hague, Martinus Nijhoff, 1983), p. 164. Also Martin Heidegger, *Being and Time*, trans. John Macquarrie and Edward Robinson (New York, Harper & Row, 1962), p. 58. For a more detailed description of phenomenology, please see my *Safeguarding Our Common Future: Rethinking Sustainable Development, op. cit.*
7. See Kevin Lynch, *The Image of the City* (Cambridge, MA, MIT Press, 1960).
8. For more on this, see my article "Temporality and architecture: A phenomenological reading of built form," *Journal of Architectural and Planning Research*, II:3, Autumn 1994, pp. 211-225. See also my book, *Safeguarding Our Common Future: Rethinking Sustainable Development, op. cit.*