Environment Imagination Situation
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Abstract:
Engagement with a placement can foster interdisciplinary research. Becoming familiar with a place combines developing an understanding of situational specificity and a larger cultural mentality. When members of different disciplines come together in a place, they combine, inter-compare, and hone their concepts and give rise to more robust understandings. Certain cultural practices and structures facilitate environmental connections and enable a cultural imagination in the direction of an environmental imagination. Not only designated parks or nature areas foster an environmental imagination, but also infrastructural features can be designed and experienced as technologies of environmental engagement. A most common place piece of infrastructure, a storm water retention pond, can be a place of engagement, a situation in which one encounters natural entities as well as other people. The experiential boundary between hydrological infrastructure and natural landscape feature can become porous and lead to a green and grey hybrid infrastructure and a public space, a place of encounter, fostering a bio-cultural nexus. Such a porous boundary fosters erosion of boundaries between disciplines, between humanities and sciences, between the public and academia.

Fig 1: Flood detention pond SCS #16, a little, messy public space.
Texas has no “real” lakes. All its lakes are human made. They are reservoirs. The small ones are ponds, mostly detention or retention ponds, built for flood control. We walk our dogs at such a pond most evenings before dinner, right here in Denton, Texas, a small town north of Dallas. We have done this for years. Our pond is a little, messy public space. All kinds of folks and ‘feathers’ are hanging out there. Tonight there was an over-sized white pickup truck with a big fishing rig, a bulky guy and his toddler son. Two Yellow-crowned Night Herons stood statue-still along the pond’s edge peering into the murky water, equidistant from their young one, a scraggly grey stubby version of its parents, peering into the water too. A Saudi student was sitting on a little carpet learning English from the Oxford Picture Dictionary book, sipping a water pipe. A Latino family, kids playing in the mud, petting our dogs, while mom and dad tend to a fishing line. And there are the ducks: Clan McDuck. We have observed the clan growing from just two ducks into an odd collection of nine. One morning after Easter a young couple dropped off two white ducklings, according to Chuck, our old fishing buddy. A retired underwater petroleum rig welder, Chuck now spends a good part of his days at the little lake. He is a reliable source of information about what is going on during the hours we are not there. ‘When they drove off,’ he said, ‘the duckies followed the car, but couldn’t keep up.’ That was three months ago. Now they are huge white ducks. On many a nice day people toss some food to the resident ducks; Professor Laura, another regular at the little lake with her two tiny terriers, Jack and Wesley, feeds them systematically each and every day in the evening. She buys them whole wheat bread, from Baird’s Bakery outlet store. Two weeks ago, we ran into her and she told us that she was going to visit her daughter in Singapore for three weeks. Could we feed the ducks? The next night when we came home late, a huge white plastic bag was sitting at our front porch with 15 loafs of Ms. Baird’s whole wheat bread!

Tonight there was a little kerfuffle in the pond world: one of the brown mallards was dragged under water by a giant snapping turtle. A young African-American man heard the duck screaming and hit the turtle on the head with his long fishing rod. With the help of our canoe paddle the duck was set free. She swam to the shore; her leg was seriously hurt, however. The other ducks quacking around the hurt duck, we left her sitting low in the grass. We’ll see if she makes it through the night. There are coyotes, an occasional bobcat, a fox, and snapping turtles, clearly. The great horned owl might be very interested too. We walk back to the car with the dogs. Two young Chinese women are all giggly over the two big white ducks. I give them my left over bread. They kneel down and the ducks come over, eating from their hands. We drive off with the windows down. The sun is setting, the beaver begins his evening swim, the frogs start croaking, and a high-pitched Killdeer scream punctuates the air. In the rear view mirror I see the Chinese girls making duck pictures with their iPhones.
With this small-town-based everyday vignette I set out to expand the toolbox for “Linking Ecology and Ethics for a Changing World: Values, Philosophy, and Action.” During our Cary Conference we discussed in depth the advantages of a closer collaboration between sciences and humanities. We identified various reasons for more cooperation. Amongst those that kept surfacing were the following. Teamwork broadens and improves both scope and quality of knowledge. The collaboration of different disciplines has more potential to bridge local and global issues on different scales, thus facilitating a bio-cultural capacity to cope with global change.

Also the nature of inter-disciplinarity was a crucial recurrent theme. It does not mean that each cook stays in their own kitchen and the research results of various disciplines are just added to each other—a philosophical sauce poured over ecological data, scientific seasoning added to an ethical stew. No, a fruitful interdisciplinary collaboration entails working as a team, developing an integrated and synergistic project over time. It means building trust; co-developing questions, methods, concepts, and narratives; writing grants and project proposals together.

How are we to facilitate such collaborative relations? I see as a pivotal element the realization of situations in which the various groups regularly meet, get to know each other and work together. One can think of UNESCO Man and

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1 I want to thank Laura Ogden for many thoughtful discussions during our morning walks on the gorgeous grounds of the Cary Institute of Ecosystem Studies in Millbrook, NY, during the Cary Conference XIV, May 2011, and Brian O’Connor for his close reading and suggestions. Photo credits: all photos produced by Brian C. O’Connor and Irene J. Klaver.
Biosphere (MAB) sites and Long Term Ecological Research (LTER) sites: they create situations, that is, places and structures to listen to each other, to the specificities of the place, and to the diverse human and more-than-human communities that constitute the place. This facilitates fostering a feel for each other, a crucial foundation for social political cultural economic and ecological research and analyses. From this basis further questions emerge, as well as a sense for restrictions and possibilities, resilience and fragilities. In the last part of this essay I will come back to the opening vignette and explore how small-scale everyday places also afford experiences where different worlds meet and actually engage with each other. Engagement with the place, rooted in a familiarity grown over time, is the crucial feature, in the large-scale well-structured research site as well as in the almost accidentally emerging local meeting place.

The humanities (in all their diversities) are often seen as contributing to this engagement and familiarity through their communication skills, including a variety of writing styles and visual media, providing multiple links between science and society. While this is certainly the case, humanities’ role cannot be reduced to a mere ancillary companion to ‘real science,’ conveying the scientist’s research to a larger audience. That would deny that the humanities are concerned with fundamental research in their own right. Environmental philosophy considers practical as well as basic theoretical questions, varying from issues of rights and values to ontological and epistemological investigations into the nature-culture relation, including questioning the dualism that is implied in this very phrasing of nature versus culture. Furthermore, an image of the humanities as a mere go-between—to tell the sciences what lives in society and notify society what solutions science has come up with—conjures up an impression of academia and society as separated realms. Clearly this relation is far more complex and also here—as with interdisciplinarity—a more interactive approach is called for. Society and academia both benefit from a further integrated way of working and understanding: community engagement (in various directions) influences the type of questions asked, the narratives written, the topics (and experiences) researched or taken into consideration.

For these reasons we need to cast the net of relations between the fields of ecology and philosophy and between academia and society widely. Only then can we deal constructively with environmental changes and challenges. The complexity of the issues warrants a multiplicity of perspectives.

I add a cultural perspective to our toolbox for “Linking Ecology and Ethics.” Becoming familiar with a place combines developing an understanding of situational specificity and a larger cultural mentality alike. In the social sciences mentality or mindset is also called cultural imagination or social imaginary. In the following I zoom in on this latter aspect. I will develop a notion of cultural imagination in the direction of, what I call, environmental imagination. This includes understanding how cultural practices and structures can facilitate or impede a relation with one’s environment.
In J. Baird Callicott’s chapter this larger encompassing cultural context was related to worldviews. Both worldview and environmental imagination seem to privilege the realm of vision—at least, insofar as imagination is connected to images and imagery. However, cultural imagination or social imaginary goes beyond the visual into a syn-aesthetic understanding of the way we conceive our world. It focuses on how we are engaged in the world, instead of looking at the world. It acknowledges us as situational beings: we are intrinsically part of a larger context, a larger world. This being in, or being with, I will explicitly explore here. How does being in certain situations afford particular experiences, activities, perceptions, and modes of knowledge? With these questions in mind, I will bring us back to the experiential situation of the little lake I sketched at the beginning. Where LTER and MAB sites are important, it is as vital to realize simple everyday life situations where people experience and are engaged in an ordinary way with (a slice of) their natural environment.

How to create ordinary practices, places, and technologies of engagement? Dealing with these questions provides additional tools to our collaborative quest. It broadens the notion of ethics in the direction of ethos, attitude or habit, which in its Latinate form is related to habitare, living in a place (Rozzi et al. 2008). Humans as situational beings are in situ, in a certain site or place. Such an expanded sense of ethics as ethos means that our endeavor of linking ecology and philosophy has also ontological (exploring the realm of being), epistemological, political, cultural and experiential components. This provides further tools to conceptualize and practice ways of thinking and working together as ecologists and philosophers.

An excellent example of this place-based approach is the work Ricardo Rozzi describes in his chapter. He and his fellow researchers have been involved in the community of Cape Horn on the southern point of Chile, not just as academics, but in situ as inhabitants. Over the years indigenous Yaghan community, government authorities, teachers and researchers have fostered mutual familiarity and have become engaged in the conservation of habitats at local, and regional scales, culminating in the creating the Omora Ethnobotanical Park in 1999, and the UNESCO Cape Horn Biosphere Reserve in 2005.

Facilitating people’s engagement with their environment is not only a question of raising awareness, political commitment or education, but also of joy, curiosity, and wonder about one’s environment in everyday life. It creates stories. Situations are embedded in stories, which require and create a setting for specificity, for specific practices and technologies of engagement. Perhaps most significantly I want to think beyond a mere functionalistic approach of ecosystem services and planning, and beyond a mere reactive discourse of adaptation, toward a more proactive stance of creating overtures, possibilities, aspirations, gestures that initiate relations, participation, stories, connections, inventiveness, ingenuity; of creating situations where engagement and sociality come back in, where we think, feel, argue; where we plan for the encounter, which also means, plan for the unplanned, for leaving things open, for creating
openings, places where things happen, where people meet each other and the 'more than human,' for the unexpected, for a Lebensraum, i.e., a place that is alive, where we experience and taste life, where the political aspect is part of nature, call it 'a controlled de-controlling of control,' call it wilderness instead of wilderness, call it the un-thought of nature and culture, call it possibility on the edge of necessity. This might sound exciting, or grotesque—but what is at stake is the necessity of these encounters, to get a sense for what matters in nature, in ecology, in politics, in a culture in which nature is an intrinsic part of culture again, to start rethinking and re-living nature and culture.

In the following triptych I sketch pathways for this encounter, for the creation of situations. I begin with a short sketch of the power of environmental philosophy conceived broadly, I will segue into a theoretical framework of environmental imagination, and after these theoretical groundings, I come back to the place in my opening vignette. The ‘little lake’ in Denton, Texas, is a most common place, an infrastructural storm water feature one can find in every American town. I show how infrastructure like this can function as a technology of environmental engagement. I see this as part of a larger, river basin awareness--what I call, a watershed mentality. This mentality can be fostered in many ways, from large and expensive urban renewal projects to small-scale levels of local storm water management. The art is to create situations where one can experience more than a built and controlled environment, and develop a sense of environmental imagination.

1. What is Environmental Philosophy?

Environmental philosophy is invitational and transformational: it in-vites thinking into life as well as life into thinking (Klaiver 2007). Life is vita in Latin—the same vita as in vital and in vitamins. An in-vita-tion leads to new connections, new situations, or a renewal of existing relations, which entails change and transformation. This affects how we understand things. As Wittgenstein (1971) says, “understanding [...] consists in the very fact that we 'see connections.'” This is the case for philosophy in general; it makes connections, reveals relations between entities, thoughts, and events, so elucidating our understanding.

Environmental philosophy has (re-)opened certain realms of relevance to philosophical inquiry by foregrounding our connections to places and situations, to the more-than-human world. It situates details into exquisite specificity, accommodating the broadest or most general invitation: of life itself, including our relation to the conditions of life.

Environmental philosophy is an interdisciplinary and interactive endeavor, taking place at the interface of multiple institutions and practices. It deals with global issues on a local level and with the effects of local issues on a global scale. This involves science, policy, economy, law, ethics, aesthetics, religion, history, etc. An environmental philosopher is a specific generalist, someone who can
connect various relations, sees the multiple angles in a particular perspective, the world in a grain of sand.

An environmental philosopher is a translator and an initiator: translating various concerns along multiple perspectives opens up new situations and affords us the freedom of ongoing new beginnings. It is crucial to an understanding of the various viewpoints, positions, places and experiences of others. Environmental philosophy enlarges the category of the “other” beyond human beings. It enlarges ethics in the direction of ethos, resonating with “habitat,” “inhabitants,” and “habits” (Rozzi et al. 2008). It questions certain mentalities and provokes and evokes different modes of knowledge and experience, to enhance cultural imagination into environmental imagination.

2. What is Environmental Imagination?

Philosophically the imagination has run the gamut from a faculty of the mind, connected to a flight of fancy, a far inferior mental process than the faculty of reason, to the seat of creativity, at the root of science and art. It gained increasing philosophical attention in the last decades of the 20th century.

Within environmental philosophy, the imagination has been taken up occasionally. In Respect For Nature environmental philosopher Paul Taylor (1986), working from a biocentric egalitarian approach to other species, was one of the first to attribute a crucial role to the imagination in providing “genuine understanding” of other species by “imaginatively” placing oneself in the position of the other organism so that one can look at the world from its standpoint. Sara Ebenreck (1996) thematizes explicitly the important potential of the imagination in her article “Opening Pandora’s Box: The Role of Imagination in Environmental Ethics” and points at the powerful influence of metaphorical constructs of nature. As did Paul Taylor, Ebenreck sees the activity of the imagination as a vehicle to envision the perspective of other than human beings. She broadens the workings of imaginative empathy by referring to the imaginative visions of indigenous cultures. Despite this larger cultural connotation, Ebenreck ultimately sees the work of the imagination as an activity of the individual, just like the work of reason. Her important contribution lies in the fact that the imagination is no longer considered to be inferior to reason but receives a complementary status. Roger King (1999) also foregrounds the imaginative power of metaphors and narratives in his article “Narrative, Imagination, and the Search for Intelligibility in Environmental Ethics.” He explicitly adds the significance of narratives for the articulation of environmental ethics and the creation of “discursive spaces” for environmental discourse.

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2 Part 2 is based upon my previous writings on environmental imagination. See Klaver 2012 and 2013.
3 See for example the works of Casey, Kearney, Sallis, and the Stanford Encyclopedia of Philosophy. See also Foster and Swanson.
The formative relation between space or place and narratives or metaphors has been most carefully examined by literary scholar Lawrence Buell (1995), who coined the very term 'environmental imagination' in his work *The Environmental Imagination: Thoreau, Nature Writing, and the Formation of American Culture*. The book became a seminal text for environmental literature, or ecocriticism, one of environmental philosophy’s sister disciplines in the humanities. In detailed literary analyses Buell shows how deeply intertwined human history and the environment are—the latter not just a framing or staging for the first. According to Buell, a writer’s imagination is profoundly influenced by the specifics of a place, such as its geological, biological, geographical, historical, and ecological characteristics. Where Buell’s focus was on Anglo-American imagination, ecocriticism has expanded its horizons over the years to include global, postcolonial and environmental justice themes as, for example, in the work of Ursula Heise (2008).

Here I expand this sense of environmental imagination further by connecting it to a social political body of literature around cultural imagination. Benedict Anderson’s work on the imagination in the context of the nation state is crucial here. In his influential book *Imagined Communities* Anderson (1983) defines the nation as an “imagined political community.” He calls it imagined “because the members of even the smallest nation will never know most of their fellow-members, meet them, or even hear of them, yet in the mind of each of them lives the image of their communion.” That is, they experience themselves to have similar interests and they identify themselves as being part of the same nation. The nation-state became a powerful master narrative or imaginary in the Western world in the modern age, replacing the two previous dominant Western imaginaries of the religious community and the nobility. Anderson shows convincingly how nationality, nation-ness and nationalism became powerful “cultural artifacts” and “once created, they became ‘modular,’ capable of being transplanted . . . to a great variety of social terrains, to merge and be merged with a . . . wide variety of political and ideological constellations.”

Edward Said develops a similar sense of the “imagined” in his concept of “imagined geographies” which refers to the spaces that are created through certain discourse, texts and images. In his book *Orientalism* Said (1995) reveals how the constructed colonial view of the Orient based upon popularized images and travel writings functions as a structure of power, a tool to control and to subordinate certain geographical areas.

As with Buell’s imagination, Anderson and Said’s imaginaries are not simply located in the individual subject but are part of a larger dynamic. Anthropologist Arjun Appadurai most explicitly explores this sense of imagination as a property of collectives, instead of as a faculty of the gifted individual. Collective representations, according to Appadurai, are not subjective inventions, fantasies or desires, but objective facts, leading to a plurality of imagined worlds. He takes Anderson’s sense of imagined communities from the nation-state to a
globalized world, emphasizing the active workings of the imagination as a social practice.

The image, the imagined, the imaginary--these are all terms that direct us to something critical and new in global cultural processes: the imagination as a social practice. . . . a form of work (in the sense of both labor and culturally organized practice), and a form of negotiation between sites of agency (individuals) and globally defined fields of possibility (Appadurai 1996).

For Appadurai, Anderson and Said cultural imagination bespeaks a social-political or culture-based field, while for Buell it is primarily a place-related, or nature-based dynamic. This nature-culture difference seems to reflect the debate between natural determinism versus social constructivism in the social sciences and humanities. However, the picture is a bit more complex: for Buell and other ecocritics the experience of place is also culturally (and historically and politically, etc) mediated, and, vice versa, social-political-cultural analyses do note that events take place somewhere. Still, one could say that the latter have a tendency to underestimate the significance of the natural environment, while the former might tend to over-emphasize it. Bringing these perspectives together facilitates seeing them on a continuum rather than in a dualistic or dichotomous fashion. It accentuates that they are in fact deeply intertwined and predicated upon each other, co-constitute each other (Klaver 2001).

Co-constitution is at the heart of the work of French philosopher Maurice Merleau-Ponty. He shows how oppositions are mutually constitutive or co-constitutive. Already the Pre-Socratic thinker Heraclitus emphasized this approach; he pointed out how we only experience the cold because we know the heat; if temperature would be constant we would have neither concept. Similarly with night and day: we experience light because there is dark. Merleau-Ponty contrasts this mutually constitutive approach to a long tradition of Western philosophy to see oppositions in terms of mutually exclusive dualisms. Especially the dualism between subject and object has been pervasive, deeply imbedded in Western thought, and at the root of a variety of interlocking dualisms, such as activity (or agency) versus passivity, resonating in culture versus nature. A dualistic mindset comes with a value attribution, with an implied sense of superiority (culture, agency) versus inferiority (nature, passivity) and hence an implied legitimation for use, domination and exploitation. The inert material or natural object is waiting for the human intentional subject to do something with it. It became the basis for a Western conception of passive nature, ready to be used by culture. This approach was radically re-thought by Merleau-Ponty in the early 1960-ies.

In his latest work, the Visible and Invisible, Merleau-Ponty (1968) describes his philosophy as developing “the fungierende [operative, I.K.] or

\(^4\) For excellent work on the intricacies of mediation and imaging, see Grusin and Bolter.
latent intentionality which is the intentionality within being.” Intentionality is no longer located in the human subject, neither is it now placed in the object, but it is operative between the two. For example, seeing a glass of water makes me realize I am thirsty. This shifts the locus of intensional agency from a sheer focus on the individual subject as agent to, what I call, a situational agency. Intentionality is operative in a situation: the reason why I do something is related to a variety of experiential vectors; intentionality arises in the very interaction of inward and outward forces, neither merely in me (voluntarism), nor completely outside me (determinism), but in a co-constitutive field of the two.

Similarly, I see environmental imagination as operative imagination, understanding operative in Merleau-Ponty’s sense of the word. Environmental imagination is not simply located in the individual, neither in the environment, but is operative, arises out of the interplay between the two. Larger cultural and material constellations or patterns (of being) co-determine how we experience and conceive of things. As operative intentionality, operative imagination always takes place in a situation, and is in that sense a situational imagination. Within embedded practices and events we imagine our future, present and past.

This brings us back to the importance of situations. The question now becomes: how can a particular situation facilitate an environmental imagination? For this I will return to the beginning, to our little lake, our local storm water detention pond. I will locate the detention pond in its larger watershed and relate its increasingly storied life to the shift in mentality that is occurring around urban watersheds. This shift gestures at the rise of an environmental imagination. Local everyday situations can be places of affordance and create the potential for fostering such an environmental imagination in the most mundane practices and infrastructural places, at the interface of nature and culture.

3. Modeling Environmental Imagination in a Situation

3.1. Modeling Grey to Green Infrastructure to Public Space

For the first time in history more people live in urban areas than in rural communities. One consequence of rapid urbanization is the distancing of people from the other creatures of the planet. Another consequence is an unprecedented rise of impermeable surfaces in the form of roads, parking areas, rooftops, etc. Storm water washes over these surfaces, picking up chemical and microbial pollutants—such as oil and fertilizers—before draining into the storm water collection system, a public drainage system with (usually) publicly maintained pipes, culverts, gutters, and the like. Where wastewater—water from sink, toilet, shower, dishwasher, washing machine, etc.—is generally treated by a wastewater treatment plant before it is released into any water body, storm water flows in most places directly and untreated into streams, rivers and lakes.

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5 I want to thank Aaron Frith for his assistance in researching Green Infrastructure in section 3.1.
This is especially the case in highly developed and urbanized countries such as the United States where, according to the National Research Council (2008), “storm water runoff from the built environment remains one of the great challenges of modern water pollution control.”

To deal with storm water in a more sustainable way the notion of “green infrastructure” gained currency in the late 1990s in both public and management discourse on storm water and wastewater management. The President’s Council on Sustainable Development (1999) identified green infrastructure as one of five opportunity areas for sustainable community development, defining it as “the network of open space, airsheds, watersheds, woodlands, wildlife habitat, parks, and other natural areas that provides many vital services that sustain life and enrich the quality of life.”

In the United States, the transition from the grey infrastructure of sewage and drainage systems to a green infrastructure has been driven in part by the United States Environmental Protection Agency (EPA). In 1987, Congress revised the Clean Water Act to bring storm water runoff under federal regulation. The EPA maintains a National Menu of Storm Water Best Management Practices, varying from public education/involvement to illicit discharge detection and elimination. It has issued a Strategic Agenda to Protect Waters and Build More Livable Communities through Green Infrastructure (2011).

What is under-developed in these approaches is the potentiality for a cultural component in the projects. How could they be designed in such a way that they enhance the capacity for environmental imagination, for developing a watershed mentality, for facilitating cultural and natural diversity on the local everyday level? How could they not only become green, but also create situations, places of encounter? Here our small-scale storm water feature comes back in, as part of an average Texas town in the midsize Trinity River watershed in North East Texas. Lets begin with a sketch of its larger river basin.

3.2. The Trinity River basin and its big cities

Texas has no natural lakes. All its “lakes” are reservoirs, water stored behind dams. Texas is a river state. The state has many charismatic rivers, such as the Rio Grande and the Brazos. The Trinity River is not one of them. “The Trinity’s muddy” goes a line in the traditional “Texas Rivers Song” made popular by Lyle Lovette. While the other Texas rivers in the song run “glossy and gliding” or “weaving and winding;” the Trinity is just “muddy.” Cowboy stars such as John Wayne, Gene Autry, and Roy Rogers appear in popular movies with the names of other Texas rivers in their titles. Not so for the Trinity River. Its star, its ‘charismatic mega-fauna’ is the ancient Alligator Gar, a scaly predator lurking in its muddy waters.
Fig 3: Mega fauna of the Trinity River, a one-meter long Alligator Gar.

Originating in North Texas, the Trinity flows southward through the coastal lowlands, merging its murky waters into the Gulf of Mexico. Along the way it serves the residents of the Dallas/Fort Worth region, one of the fastest growing metropolitan areas in the United States, as well as residents of Houston and many smaller towns, agricultural users, and the water needs of a large watershed.

Floods long gave reason to want to “control” the waters of the Trinity. The 1908 flood in Dallas led to a large scale re-routing and harnessing of the river, creating the longest cement structure in the world at that time. Also water quality had a dark history: in the 1920s with two major slaughterhouses in Fort Worth and growing populations in both cities, the number of typhoid fever cases were rising to a level that caused the Texas Department of Health to call the Trinity River a "mythological river of death." Still in the 1960s parts of the river were so polluted that the United States Public Health Service called the stretch of 150 kilometers downstream of Dallas “septic.” With the Clean Water Act in the early seventies also the Trinity became cleaned up and laid dormant in the cultural imagination as a forgotten river.

Today, the Trinity River is clean and controlled. It has become one of the most heavily developed watersheds in Texas and provides drinking water for approximately half of the State’s population (with six million people in the Dallas/Fort Worth (DFW) area in 2010).

Just as many cities around the world Dallas and Fort Worth have begun to embrace the civic and architectural potential of their waterways and are planning
large-scale urban development around the Trinity. The Trinity is slowly percolating into the cultural imagination: from ‘Mythological River of Death,’ to basically forgotten, the river is increasingly perceived as an asset. Glossy brochures featuring Dallas’s Trinity River Corridor plans and the Trinity River Vision Master Plan of Fort Worth ("A Vision for the Future and a Plan for Success") advertise a newly found river identity around “a new place to work, live and play.” Like all self-respecting river cities, Dallas has planned a so-called “signature” bridge—in this case designed by no one less than Spanish architect Santiago Calatrava. The bridge now spans the river in the center of Dallas, while a new active urban mixed-use waterfront is supposed to “create a vibrant, active community” in Fort Worth. Words such as urban revitalization, restoring, reviving and reinventing, flow off the brochures’ pages, describing a new relation with the Trinity through river front property, hiking trails, fishing ponds, and constructed white water boating sections. The Trinity is no longer just muddy.

This comes with new opportunities and new challenges. Gentrification is a major issue: who will ultimately benefitting from this process and who will be disadvantaged? Also, who is able to participate in the decisions? Here I focus on the possibility of a re-engagement of citizens with their river, and the potentiality of the emergence of an environmental imagination around the river. Through various modes of recreation, there might rise an opportunity of re-creating a new identity around the river. If and how that exactly will happen is still to be seen.

Fig 4: Opening day of the Santiago Calatrava-designed bridge spanning the Trinity River in Dallas (March 2012).
Where these are rather high-end plans, water basin relations happen at multiple scales and in multiple fashions, and for most people in less spectacular, more low-key, everyday ways. In the following I describe how a small storm water feature, or retarding pond, has the potential to turn a hydrological infrastructure into a bio-cultural nexus and to foster an environmental imagination.

3.3. Emerging of a cultural nexus and environmental imagination around an ordinary storm water pond.

Storm water ponds have become part of modern urban development: you may see them along the road, in shopping complexes, suburban neighborhoods, and industrial centers, because they lead to a substantial increase in impervious surface area. This has serious hydrological consequences, such as a higher rate and volume of run off, and less infiltration into the soil of pollutants and hence a degradation in water quality. Storm water ponds have been designed to mitigate these effects and to provide storage for storm water. Some are designed to hold water year-round, others are designed to be dry again a couple of days or weeks after a storm.

Major flood events in the small town of Denton, Texas, which sits in the Trinity River watershed at the northern edge of the Dallas-Ft. Worth metropolitan area, led to a flood prevention program in the early 1970s. Two storm water features were created called “Soil Conservation Service’s (SCS) Hickory Creek Basin Retarding Ponds #16 and #17,” designated as North Lakes Park. Retarding pond SCS #17 and much of the land around it were developed for recreation with structured picnic areas, a fishing dock, soccer fields, paved parking areas, a recreation center, and a golf driving range. In a way, a miniature and low-budget precursor of the current master plans around the river in the big sisters Dallas and Fort Worth.

The area around the other pond, SCS #16, has been left essentially undeveloped, except for one small dirt parking area and a disc golf path. A haphazard accidental community of herons, fishermen, dog walkers, brushy vegetation, kids, paddlers, beaver, migratory birds, ducks, disc golfers, turtles and skunks has emerged around the infrastructural feature, fondly called by some ‘their little lake.’ SCS #16 or the ‘little lake’ supports a varied community that thrives in the relatively unstructured inadvertent wildness of the place.

For many people who have stumbled upon SCS #16, it has become an integral part of their everyday life with its own interface between beaver, heron, human, snake, fish, water, disc golfers, and flood management. The experiential boundary between hydrological infrastructure and natural landscape feature becomes blurred in such everyday activities. SCS #16 presents a green and grey hybrid infrastructure and a public space, a place of encounter.
Fig 5: Portion of hydraulic infrastructure of “little lake” in fair weather and rain.

It sets the stage for ‘accidental’ natural and cultural opportunities and occasions that have supported unexpected and continuing natural and cultural engagements. Such hybrid technological-natural structures dissolve strict separations between human built/technology and nature, between various social-economic groups, and between different practices (dog walking, disc golfing, fishing etc.). SCS #16 demonstrates the capacity inherent in structures, such as local retardation ponds, to enhance the lives of local residents beyond the pond’s sheer hydraulic role.

3.4. Reclaiming the infrastructure: accidental hybrid of wildness and community

In an era of rapid urbanization, infrastructural entities such as storm water retarding ponds could provide much needed ecosystem services as well as public spaces, fostering a cultural nexus around water bodies. The narrative of the social constructs around SCS #16—the purpose and plan that enabled its material creation, the measure of maintenance required to keep up the lake and its environs, and finally the use of the lake area as public space for the community of Denton—provide conceptual and strategic means by which water in urban settings may be reclaimed as more than just an essentially hidden flood protection mechanism. SCS #16 operates as a piece of hybrid infrastructure. It has become a place of affordance. It affords the appearance of the local wild. It enables people to change habits of simply driving past a detention pond in some way labeled “OFF LIMITS!” Daily concepts and actions can be changed, and can be re-practiced to include the appearance and experience of the local wild.

SCS #16, the hydraulic feature, is physically visible from the road. It is just one block from one of the primary travel and commercial routes in the city of Denton and it sits on a road that borders a newly developed large shopping area that has a concrete retarding pond behind a fence. SCS #16 is also visible in the sense of not being closed off either by legislation of “No Trespassing”
ordinances (except late at night) or by categorization into an essentially private arena for exclusive use by soccer teams or fishermen or biologists.

Fig 6: Birds enjoying "little lake:" Scissor-tailed Flycatcher, Little Blue Heron, and Great Egret

We have the opportunity to forge new ways of living along riverbanks, enjoying the river, studying its watershed, and exploring its environment. The Trinity does not have the "excitement" of many great rivers. Yet, it is a crucial watershed for millions of people. It is muddy conceptually, and that is part of its charm. In its unassuming presence it blurs boundaries and in this we find an important message for urban watershed planning.

Fig 7: People enjoying "little lake:" Prom night celebrating, full moon picture taking, and walking dogs.
The “little lake” at SCS #16 gives us a small-scale everyday low level starting place for ways of engaging in our relationship to our watershed, ways of studying our river basin and ourselves, ways of being within our watershed, and ways of promoting consciousness of our watershed environment. Part of its muddy secret is to allow in urban planning for some places to stay relatively un-planned.

Nature has, in a sense, reclaimed the infrastructure, providing a space for culture, while keeping an edge of wildness. We can explore a scale of recreational activities in which we relate the expansive metropolitan urban renewal projects in Dallas and Fort Worth with smaller scale interventions such as this one.

Fig 8: Life of little lake: beaver-cut tree, Killdeer close to its eggs in the gravel, turtle.

Nature in these small unpretentious little places is no longer ‘foreign’ or ‘external’, but intimate and physically immediate, fostering a connection with the environment and its inhabitants – some locals of Denton, the beavers, ducks, migratory birds, frogs, turtles, and so on. The capacity of SCS #16 to enrich citizens’ lives through diverse low-key cultural activities is as important as its hydraulic retention capacity. The small cluster beaver, birds, turtles, frogs, ducks, and fish at the little lake in the Trinity watershed afford links to a “nature” not ordinarily available to city dwellers. Nature and the people of Denton, Texas, have reclaimed a part of their hydrological infrastructure. It is turned into a technology of engagement, fostering a dynamic bio-cultural situation and allowing people to develop an environmental imagination.

Many situations have rolled out of this initial engagement. One of them made even the NBC television news: the collaboration with visual artist Kiba Jacobson and the City of Denton Watershed Protection Manager, environmental scientist David H. Hunter, of the Water Utilities of the City of Denton. As philosopher I did the general conceptualization for the project “Situation of
Participation: Reclaiming the Infrastructure,” and researched the issues with David and his crew, who hassled with all the practical political issues and we further researched with Kiba the final design for the infrastructural murals on Denton storm water inlet and outlet structures of Hickory Creek in Denton’s civil center area. School children helped painting.

http://www.nbcdfw.com/video/#!/weather/stories/Decorating-Storm-Drains/148971645

Fig 9 and 10: Flyers for outreach about storm water; artist working with children painting banners for storm water drains.
The narrative of the openings vignette situates the details, forms an exquisite specificity, exquisite empiricism. It creates a picture of a place that has become a place of affordance, a place where people experience each other and the other.

Together the ecologist and the philosopher, researching the *logos* of the *oikos*, our home place, a living technology of engagement, initiate new possibilities by bridging nature and culture, by creating wonder, curiosity, and overtures to wonder and curiosity; this leads to further beginnings, questioning the taken-for-granted, which has often been our material realm, our infrastructure, the natural world, the background, the soil we live on, the water we drink, the water within us.

Philosophy and ecology meet in this questioning, in creating situations, in acknowledging situations, where they come together to question more deeply, in the watershed, the particular specificity of a detention pond, an infrastructural feature, a living technology, a technology of engagement.

This ecologist does not just create facts, this philosopher does not just create thoughts; rather, together they create knowledge, questions, feelings, commitments, connections, experiences, togetherness, encounters, overtures, situations, flourishing, places of particularities, conservation for habitats, public spaces where one meet each other and the other, where the river is a bridge, where a detention pond is a bridge. They feed science, the city planners, the ducks, the imagination. They create mindfulness.

Fig 11: No caption
Keywords:
Environmental Imagination, Engagement, Situation, Culture, Infrastructure

Captions:
Figure 1. Flood detention pond SCS #16 in Denton, Texas; a little, messy public space.
Figure 2. Student from Saudi Arabia and ducks at the “little lake.”
Figure 3. Mega fauna of the Trinity River, a one-meter long Alligator Gar.
Figure 4. Opening day of the Santiago Calatrava-designed bridge spanning the Trinity River in Dallas (March 2012).
Figure 5. Portion of the hydraulic infrastructure of “little lake” in fair weather and rain.
Figure 6. Birds enjoying little lake: Scissor-tailed Flycatcher, Little Blue Heron, and Great Egret
Figure 7. People enjoying “little lake:” Prom night celebrating, full moon picture taking, and walking dogs.
Figure 8. Life of little lake: beaver-cut tree, Killdeer close to its eggs in the gravel, turtle.
Figures 9 and 10. Flyers for outreach about storm water; artist working with children painting banners for storm water drains.
Figure 11. No caption

References:
Casey E (2000) Imagining. Indiana, Bloomington


Foster L, Swanson J (1970) Experience and theory. Massachusetts, Amherst


Merleau-Ponty M (1968) The visible and invisible. Northwestern, Evanston, p 244


Wittgenstein L (1971) Philosophische untersuchungen 122. Suhrkamp, Frankfort, p 82, #122