Enchanted minds, empowered hands: Reflections from an urban food garden

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Reflecting on a terrace-farming project facilitated in an urban school, how students encountered moments of 'enchantment' through sensory interactions with the plants is explored. Illustrative examples are used to show the primacy of unmediated, direct experiences in natural surroundings as a core part of nurturing an ecocentric sensitivity.

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The students were gingerly touching the tendrils of the gourd creepers that had flourished in the rain. It had been two months since I had begun a terrace farming project to grow edible plants in a school, along with a class of eighth graders.[1] The school is located in Mumbai, a metropolitan Indian city with a population of nearly 23 million. Land is thus a premium commodity, encouraging innovative uses of apartment spaces, terraces and balconies. I had managed to convince the school principal to use the school terrace for growing edible plants. Observing their engagement with the space reminded me of the incredulity with which the students embarked on the project. "How are we going to grow plants here?!" a student had exclaimed, echoing the sentiments of many of her peers who rushed to the school roof top, curious and apprehensive. The roof was completely barren and offered a good view of a city landfill that could be mistaken for a hill, with a decent green cover during the rainy season if not for the unmistakable odour giving it away. Most students in the school had grown up in cities and had fairly limited ideas about growing plants. Some had a few ornamental plants at home, but the idea that edible plants and vegetables could be grown in a small area was new for most of them. Students were allowed to explore, observe and play while participating in various activities. As a result, students had varied perspectives and motivations that evolved organically alongside the garden itself. Some students were initially unwilling to get their hands into 'dirt' and

A view of the school terrace after a year of the project. The landfill can be seen at a distance.

preferred observing others, while others were intrigued by the novelty of the project.

Knowledge beyond the textbook

Starting from a barren terrace, the students soon realized the patience, effort and skills involved in growing plants, almost none of which could ever be covered in their school textbooks. While half of seeds sown germinated, the fragile joy experienced by the students was short lived. Soon after, unexpectedly heavy rains damaged many of the delicate seedlings. The few that survived were getting eaten by pests.[2] Many students would observe their plants closely, ask for solutions and even began researching on the internet for ways to save their seedlings. They realized that in terms of practical knowledge, the school support staff knew more than the teachers, and would flock to the gardeners for advice. Their care and concern eventually paid off when a couple of seedlings grew into healthy plants and bore them *bhindi* (okra) a few weeks later. None of their experiences could be found in a textbook, as evident in a student's simple but profound statement – "*the book doesn't explain anything*".

The explanation here is not just about the information; rather, it is about appreciating and respecting the complexity of engaging with meaningful contexts that seem of consequence to *them*. Interestingly, the teachers involved in the project also found themselves more comfortable as co-learners rather than authoritative figures needing to have 'correct' answers. The literal and educational openness provided by the rooftop farm allowed both students and teachers to explore questions and concerns that can rarely occur in classroom spaces. Questions like "Why is my bhindi plant getting infected?", "Why are

Mixed cropping in a planter created by the students.

farmers paid so little for so much work?", "Why is it important to save seeds?" naturally cropped up in sessions as their engagement helped them to pay attention to things that had previously gone unnoticed. Their shift in perception was evident in comments such as, "*we never even touched plants this way earlier. I mean we play on the grass, but not this way. To take care [...] this time we learnt how to grow the plant.*"

Rooting for sensorial encounters

Sensory participation was central to students' experience of the terrace farm. The visceral sensations of tasting the plants, digging the soil, stroking the leaves, gingerly handling the seedlings, feeling the movement of insects on their fingers, hearing the buzz of bees, smelling the composted soil and and countless other encounters, 'invited' students to participate in an evolving, reciprocal relationship with the farm environment. As Bai (2009) argues, this sort of sensuous perception arouses a participatory consciousness, and nurtures an emotional relationship to the surroundings, as opposed to the vision-based tendency to engage in discursive categorization. This process was seen at the school terrace farm, and it encouraged students to taste other plants too – such as *shepu* (dill), *lal math* (red amaranth) – that they hadn't previously seen or tasted. Bai (2009) further describes this development of intimate, embodied relationships as a process of animating the world, thereby building reciprocity and respect into relationships (as opposed to transactional interactions). Engaging in different modalities of perception facilitated what Abrams (2012) described as a shift from description 'about' to correspondence

'with' – that is, students were *responding to* the plants rather than *studying* them.

At the farm, the plants were not objects of scrutiny, rather through their growth and other changes, the plants became active participants in expanding students' relationship with their surroundings. Students gained an implicit notion of interdependence, as they harvested the fruits of the plant they had sown a few months ago. They began identifying plants based on sensory interactions, such as "waxy leaves", "thick leaves", "minty taste", "sour taste", "sharp leaves" and so on. The experiences were sometimes even unpleasant and unexpected, though students seemed to take it in their stride as an educative experience. Here, a student describes the sharp edge of lemongrass leaves:

> *"I was not very very familiar with this lemon grass; ya I knew it is used for some tea and all but just last three and four classes back, I understood that it can cut skin also because its leaves are so sharp, I experienced it!" [laughter]*

Using the body as an "organising core of experience" accentuates the immediacy of experience, along with a growing sensitivity to anticipated changes in the surroundings (Shusterman, 2004: 51). The continuously evolving landscape of the terrace, through the growth of plants, turned into a motivation for students to explore the surroundings in a somatically grounded fashion. As a student later commented,

> *"Because even in gardens you see so many types of plants, but to me they were just all green, just green, a patch of green. But now I can actually like sort of at least remotely recognize that this plant is this, that plant is that and all those things."*

A 'patch of green' gaining its unique features, arising from a homogenous backdrop, forms the basis for further engagement and understanding of one's environment. Iared and coworkers (2016) assert that eco/soma/esthetic perception stimulate ontologically rich ways of relating to nature, which otherwise remain untapped or unacknowledged in discursive modes of knowledge acquisition.

Building on moments of enchantment

This expansion in turn allowed students to attend to wider experiences, and develop greater sensitivity towards the farm space. Termed here as moments of 'enchantment' (Bennet, 2010), students' heightened awareness towards the farm activities allowed the usually ignored 'background' to present itself in novel, wonder-inspiring ways. Enchantment is a moment when the familiar is suspended from usual categorizations and can appear surreal, thereby allowing for subversive views to open up. It nurtures ways of exploration and imagination that are not amenable to language-based discourses. As a highly affectual encounter, moments of enchantment open ways of meaningful engagement with one's material environment. These need not always be

Students observing some tomato plants.

pleasant experiences (as finding shreds of plastic in the compost, or a plant under severe pest attack) but are powerful in terms of disrupting disengaged modes of interacting with one's environment.

For instance, once aware of the millipedes in the soil, students could see them everywhere, journeying through perilous spaces between soil planters. Observing their routes led students to notice the slime trail of snails and slugs which could be hiding under the flap of a cardboard box. They would lift the damp flap to see it dotted with tiny fungal structures... but, hold on, the fungi almost seem like flag posts for the hordes of ants passing the cardboard flap! Follow their trail back into the soil where the millipedes were first seen... one can see the 'worlds' students could have traversed through their sensory receptivity of the surroundings. Bennet (2010: 4) comments that "To be enchanted is to be struck and shaken by the extraordinary that lives amid the familiar and the everyday". These experiences suspend control and predictability, in order to make space for awe and fascination. Bennet (2010: 13) further argues that valuing such moments "enhances the prospect of ethical engagement". Various episodes at the farm indicated students' increasing sensitivity towards the creatures and plants on the farm. They would rescue the 'wayward' millipedes straying too far from the soil, concerned that they might die in the heat or become prey for the crows. They would fuss endlessly around plants that were afflicted with pests. Barren soil would be carefully covered with mulch to keep the soil "happy and moist".

Honing one's attention towards such particular aspects of the environment generated instances of 'response-ability' (Haraway, 2013; Kayumova, McGuire

and Cardello, 2019), wherein individuals could respond to, and partake in, a shared sense of well-being. Their attribution of emotional states to the creatures and plants could be argued as ways of empathizing with these living beings as responsive and deserving of care. Postma (2006) argues for the centrality of a care-based relationship in engendering environmental sensibilities, stating that these can't be derived from abstract principles of responsibility or justice. He writes, "In our caring, we express a recognition of something that fulfils us in a particular way, and invites the response: 'When the other's reality becomes a possibility for me, I care'" (Postma, 2006: 156).

The task of educating in a disenchanted world

The fact that we are living in the midst of ecological crises is all too evident through the nearly steady stream of news, findings and plethora of information. Terms like 'global warming', 'climate change', 'ocean acidification' and so on, have been assimilated into everyday vocabulary, yet the increased information doesn't seem to translate into impactful or sustained actions. On the contrary, there is a tendency to disengage from the clichéd doomsday scenarios that appear too far, too big or too abstract to make sense of, let alone act upon. As George Monbiot (2017) comments, "'The environment' is [...] an empty word that creates no pictures in the mind". There are no specific connections to build, no memories to recall and no emotions to feel invested enough. Educators today need to translate the sterile information of 'environment' into stories and narratives of the 'natural world'. The nearby landfill and the barren terrace had been a part of the students' environment without providing them any opportunity to reflect and act on the implicit connections and possibilities. Growing food in that space allowed them to develop 'kithship' (Haupt, 2021) or an intimacy with the surroundings, as creatures and materials caught their attention with newfound relevance: leaf litter as potential compost, discarded boxes as planters, seeds in the kitchen as potential seedlings, empty balcony spaces as future mini-gardens, and so on.

These ontological shifts are not trivial because environmental education, at its core, engages with the question of why and how to care for the natural world, of which we are a part. It is not enough to be literate about ecological problems and short-term solutions. Rather, education needs to generate actions and values that shape people's way of being in the world (Chawla, 2009). Being requires *becoming*, through an openness to encounters that foregrounds experience over knowledge. Episodes of enchantment strengthen temporal and spatial relationships, and care for one's immediate environment gets built into the process. Bai (2009) exhorts us to snap out of the 'spell of the discursive' that lays claims on our perception by imposing an abstract, symbolic and logical view of the world. Instead, one must be willing to participate in, be affected by, and care for the relations existing within the environment.

Education has to squarely confront the fact that the way many humans currently exist on the planet needs changing, that this change is required at the cultural level. Motivation for these changes can be nurtured through

pedagogies that are actively aimed towards telling new stories of a world in which all beings can flourish. This would mean stepping out beyond the boundaries of a classroom, and accepting the unpredictable outcomes of looking outside a window to watch birds, climbing up a rooftop to grow a garden or cleaning a local lake. Rather than simply learning from these contexts, students need to have the freedom to learn with and through them as well. Initially, the science teacher saw the rooftop garden as a relevant space to teach students about plant anatomy. However, students were already observing much more than just the plant structure. They revelled at the sight of fungus growing overnight, the ants lining up along mysterious routes in the garden or seeing a tomato ripen on the plant. They were partaking in the relations and inter-dependencies constituting the garden itself. As co-teachers we need to acknowledge the moments when students attend to nature meaningfully. In these moments, nature is offering something beyond our ability to rationalize or teach. And when these encounters arise, we need to provide time and space for the lessons to run their course. These radical shifts require an overhaul and rethinking of how we conceive of the natural world.

Moving away from human-dominated narratives demands that we develop the capacities, skills and empathy to listen to more-than-human beings. We are fortunate, then, to have nature as a willing and patient teacher. During one of the sessions at the rooftop garden, students gathered to observe some soil layered with compost. Staring at it for a while, a student remarked, "*the soil looks alive! Everything is moving there!*" pointing to all the creatures, ants and earthworms wriggling in it. The recognition of something as living struck me as a profound statement, and one that we are prone to forgetting so easily. Yet, now is the time for remembering, and affirming the possibilities of resilience, resistance and restoration. An ontology of respectful co-existence lies forever within our reach, if we can step outside our narrow cognitive confines to accept the invitation.

Notes

1 I have explored this at greater length in Dutta and Chandrasekharan (2019), and in Dutta (2019a; 2019b).

2 The idea of 'pest' was interesting, as it evolved into questions and concepts of an ecosystem, pest–predator relationships, and the constraints of working in an urban context. The students had to grapple with ways of obtaining a harvest without resorting to spraying chemicals, and thus trying to find natural ways to maintain some balance. For instance, during the rains, they were excited to spot some snails, and even kept one as a class pet, until the snails began to overrun the farm and eat most of the plants. The students read about it and realized it was an invasive species of snail that did not have natural predators in India and thus had become a pest. In farming, monocultures and indiscriminate use of chemicals give rise to 'pests' and 'weeds' that are really phenomena of our own making. While all the nuances of the concept could not be explored, the experience gave some first-hand ideas to the students.

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