Playing with Plants

In this academic piece, **Soham Kacker** shares how 'befriending' plants as playmates in his childhood opened the door to an adult career in ecology and to his lifelong love of plants

I remember crouching beneath the *gulmohar* tree, searching amidst the crisp layer of fallen leaves and the patchwork carpet of crimson petals, looking for green-gold treasure. Fallen buds. They had to be just right, the five fused sepals just beginning to blush red at their seams, and taut with the swelling petals within. If they were too dry, they would crumble in my young fingers as I tried to open them, and if they were not mature enough, they would be impossible to peel open.

Satisfied with a harvest of five or ten buds, I would run to find my human friends. Others would have brought their own garden finds – the pods of Mexican bluebells, or the pungent fruits of the Persian lilac tree. An afternoon of revelry always followed.

Much of my childhood was spent outdoors. I often claim that that is why I am an ecologist today. Having said that, I cannot in all honesty claim that my open-air childhood was spent keenly observing things with a notebook and a magnifying glass, in imitation of the scientific method. Although I collected bark, twigs, flowers and leaves with the same enthusiasm and curiosity that most children possess, I did not observe, or analyse, or infer. I did everything but – I spent hours foraging, collecting, picking, picking apart, tasting, crafting, competing. I played.

Looking back, this interaction, this playfulness was, for me, unique to my relationship with plants. While I loved to watch the squirrels and peacocks and hornbills through binoculars, none of those interactions were physical, tangible. We were separated by distance and language, but with plants, I could touch and dissect and collect, and through playful interaction, I began to pick up on some of their language.

In truth, plants were more than play*things*: they quickly became my play*mates*.

The games we played relied on the specific characters of specific plants – in other words, you had to get to know the plant before you could play with it. You had to make friends. With the snapdragons, you needed to know exactly where to pinch with the deftness of young fingers, to make them open their wide mouths and 'talk'. With the honeysuckle, you had to know exactly which flowers to pick, and if your knowing was correct, you'd be rewarded with a sweet

drop of nectar. A banyan leaf folded on itself, held together by its own stem, would make a perfect raft for floating in monsoon puddles, but if folded the other way, the raft would capsize.

Befriending plants as playmates was how I came to love them. This went far beyond what academic inquisitiveness could uncover, or what horticultural experimentation would later reveal. This was a foundational familiarity, one that also constituted a way of knowing.

Now I think: could there be a playful ecology?

Who are our fellow participants and playmates, and what is our playground? Can playing shift the way we see Nature and our place within it? First, I must introduce you to some of my playmates from my childhood...

The plants felt playful too

If you brave the post-monsoon mosquitoes and go into the tall grass that grows at the edges of the playground, you will find, held above the sea of new green, the spear-like inflorescences of *chipku* grass (*Setaria verticillata*). *Chipku* means 'sticky' in colloquial Hindi, and the seed heads are just that – sticky, like Velcro. They can be thrown deftly at others in a spirited game of tag.

Those *gulmohar* (*Delonix regia*) buds I picked earlier: peel away the spongy outer sepals and the fleshy red petals to reveal the many curved stamens. These can be interlocked in 'battle', with the player who succeeds in detaching the anther of their opponent's bud being declared the winner.

The fan-shaped flowers of *Petrea volubilis* twirl through the air as they race downwards, and players compete to see whose flower will reach the ground first. The young buds of the tulip tree (*Spathodea campanulata*) are filled with a pungent-smelling, cloudy fluid that surrounds the developing petals. Deftly pierce the narrow tip of the bud with your fingernail, and you have a loaded water-spray to aim at your friends, or a felt-tipped marker with which to draw evanescent patterns on the ground. Press the mature seed pods of Mexican petunias (*Ruellia simplex*) at the base, and watch as they spring open with a soft 'crack' and scatter their seeds far away.

Many flowers and leaves lend themselves to making wreaths and garlands: you can thread lxoras (*lxora javanica*) and the flowers of the Rangoon creeper (*Combretum indicum*) by inserting the neck of one into the throat of another to make running chains. A variety of seeds can become mancala pieces – we always played with the scarlet red seeds of the coral-seed tree (*Adenanthera pavonina*), or the equally striking red and black seeds of the Ratti vine

(*Abrus precatorius*). Each player picks from their row, and 'plants' the seeds in every subsequent pit going around the board until their seeds are over. The rules of the game vary, but the objective is to have as many seeds as you can in your 'store' on either side of the pit.

These games are only made possible by the playfulness of the plants – the buds must be ready, the seeds must be right, the leaves must cooperate, must be willing to play. Play was seasonal and temporal, based on the character (or *personality*, though plants are not people) of individual playmates.

The *chipku* grass only came up after the rains. The Mexican petunias bloomed through the summer, but their seeds were only ready on a particularly hot day. Tulip tree buds would dry too fast on a hot day, so were best collected when it was comfortable. And the game was by no means one-sided either – the brightly coloured seeds, the flurries of falling flowers, the cracks and pops and sprays: the plants felt distinctly playful too.

Through play, my playmates gradually became more familiar to me, more known. Like how the *gulmohar* tree, which had one aberrant petal, paler and more patterned than the other four. How the helicopters we fashioned from the *Petrea* vine were not in fact flowers, but a stiff papery appendage that long outlived the brief life of the blooms. How the seeds of the laburnum (*Cassia fistula*), which became mancala pieces when others were in short supply, were each encased in their own leguminous compartment, sealed in with sticky-sweet tar. Extracting enough for a game could take a whole afternoon.

Naturalised, through play

Later, I would be introduced to other playmates through the plants – the butterflies and moths who read the *gulmohar*'s aberrant petal as a landing sign; the ants who carried away the tulip tree buds; the tiny beetles who tried to eat the laburnum pods but were deterred by the same sticky sweetness that caused the jackals to relish them. To the theorist who says that it is through play that children learn to be a part of society and are *socialised*,¹ I would reply that through play I became *naturalised*; I learned my place amongst the trees and flowers and birds and beetles.

In life I would come to recognise this playfulness many times, connecting me to playmates in space and time. The ancients of the Sanskritic cultures designed gardens and natural spaces for play, detailing how to arrange flowers in pleasing ways, how to distil perfumes, and how to make colours and paints from plants and ores.

¹ See the work of Berk et al. (2006) as cited in Rashmi Pramanik and Shreyasi Bhattacharya, '<u>Play and</u> <u>Indigenous Games of Children: A Cultural Heritage of Western Odisha, India</u>', *Antropología Experimental*, 19, 2019, doi:10.17561/rae.v19.03.

In a 12th-century compendium, the chapter on woodland sports, arboriculture and garden design is titled '*Vanakrīdā*' ('forest play').² In the epic poem of the cloud messenger, the poet Kālīdāsa describes parted lovers as making the same floral garlands as those from my childhood, strung up on lintels and doorframes, each flower marking a day their beloved would be away.³

Play in these contexts is not infantilised. Taking many forms, it becomes friendly play, lone play, love play, thrilling play – encompassing the entire range of human emotion brought into contact with many non-human playmates.

By playing mancala with those bright red seeds of the coral-seed tree, I unknowingly linked myself to Bronze Age ancestors, who carved out petroglyphs in solid rock to perhaps play a different version of the same game.⁴ From the Aravalli ranges to the Arabian peninsula to the Pacific Islands and Oceania, the act of 'sowing' seeds on a mancala board has united us with Nature and each other in ecologies of play.

That same image of sowing seeds, though, conjures dark visions of cotton plantations in North America, where enslaved Africans played mancala to reconnect with their homeland through plants and through play.⁵ By 'sowing' seeds in play, they reclaimed the vocabulary of exploitation, but also enacted a hope and prepared for a future in which planting and play both would be carried out on their own terms. Here playfulness becomes the tools to imagine alternate realities, to create other worlds.

Creating other worlds

In other contexts, botanical playmates connect human playmates across geographies and cultures. In the simplest act of gathering plants – the search for the perfect bud or leaf – I enact a game of children in Odisha, *patar anati* ('bringing the right leaf'), predicated on the players' ability to find and bring a particular leaf specified by their competitor.⁶

The game is curiously reminiscent of the story of the fox-turned-maiden Tamamizu from Japanese lore, whose mistress arranges a playful contest to see which of her friends can find

² The Manasollasa of Soméśvara III as detailed in Nalini Sadhale and Y.L. Nene, '*Bhudharakrida* (Royal Enjoyment on a Pleasure-mound) in Manasollasa', *Asian Agri-History*, 14 (2010), pp. 319–35.

 ³ Verse 86 in H.A. Ouvry, *The Meghadūta or Cloud Messenger by Kālīdāsa* (Williams and Norgate, 1868).
⁴ Michele C. Ziolkowski, 'Rock on Art: Petroglyph Sites in the United Arab Emirates', *Arabian Archaeology and Epigraphy*, 18.2 (2007), pp. 208–38, doi:10.1111/j.1600-0471.2007.00262.x.

⁵ Katrina Christiano, 'Gaming among Enslaved Africans in the Americas, and its Uses in Navigating Social Interactions', 2010, <u>doi:10.21220/s2-sta7-av85</u>.

⁶ Rashmi Pramanik and Shreyasi Bhattacharya, '<u>Play and Indigenous Games of Children: A Cultural Heritage of</u> <u>Western Odisha, India</u>', *Antropología Experimental*, 19, 2019, doi:10.17561/rae.v19.03.

the most perfect autumn leaf.⁷ The story is particularly interesting, for characters seem to travel effortlessly between the human and natural worlds, almost as if imploring the reader to breach the divide between the two. Perhaps play not only helps us create other worlds and realities, but also shows us that they are close at hand (closer than we dare think), accessible through the simplest act of gathering a leaf.

But what do any of these disparate, playful strands have to do with ecology?

In many ways, Indigenous ecologies are inherently playful. To speak of a playful ecology is to speak of a relationship with humans and non-humans that is open to unstructured imagination, allows for pretend and make-believe, and in the process creates worlds where the boundaries between Nature and culture can be effectively blurred. What else do the ancient poets and storytellers, farmers and philosophers do, if not this?

In the 'real' world, I may not be able to speak with the *gulmohar* trees or the ants gathering around the tulip tree, but the play-world allows me to shed that constraint. Play makes space for enchantment, where "non-human beings demand our attention and call on us to act" and to interact.⁸ In the play-world, knowledge suddenly becomes two-way, two-eyed. It is not me observing Nature, but Nature "demanding my attention".

I need not just look at Nature. I can become it – I am the same as the jackals at the laburnum, or the breeze in the *Petrea* vine, and this "embodying [...] creates new resources and metaphors for understanding".⁹ Play is the most powerful mode of this embodiment, fostering affect, mutual understanding and love, shifting our ways of thinking and knowing from being individualistic to being biospheric.¹⁰

Uniting human and non-human

Effectively, playful ecologies are emergent states arising from the ongoing interactions between diverse play-worlds. These play-worlds unite the human and non-human in multispecies entanglements that broaden and deepen the ways in which we see ourselves in/as Nature.

⁷ The story of Tamamizu appears in a medieval Japanese collection of prose, *Otogi-Zōshi*. For the story, see 'The Tale of Tamamizu', Kyoto University Rare Materials Digital Archive. <u>https://rmda.kulib.kyoto-u.ac.jp/en/item/rb00013653/explanation/otogi_01</u> [accessed 21 February 2025].

⁸ Timothy Stacey, '<u>Toying with Animism: How Learning to Play Might Help Us Get Serious About the Environment</u>', *Nature and Culture*, 16.3 (2021), pp. 83–109, doi:10.3167/nc.2021.160304.

⁹ Tessaly Jen et al, '<u>Friends as Flowers: How Perspective-Taking and Empathy Transform Children's</u> <u>Relationships to Science and Nature</u>' (presented at the International Conference of the Learning, 2021). ¹⁰ Tessaly Jen et al., '<u>Friends as Flowers</u>'.

Play needn't be intentional in an ecology of play – as in a study with children and an urban park in the UK: "The grass in the park grew with the rain and the sun which challenged anthropocentric understandings that humans are responsible for growing and protecting plants, deciding who lives and who dies. The teachings of grass are lessons in entangled futures."¹¹

Today, though, we seem far removed from these entanglements, caught as it were in trappings far less metamorphic or benign. We have forgotten somehow to play *as* Nature or play *with* Nature – only to play *in* Nature, if that.

Perhaps the Sanskrit poets, and enslaved peoples, and Lady Tamamizu already experienced these entanglements, more directly and intimately than we do today. And perhaps, if we let ourselves, the way to kindle again that embodiment and that intimacy is simply to relearn to play.

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¹¹ Hannah Hogarth, "<u>I Like to Dance with the Flowers!</u>": Exploring the Possibilities for Biodiverse Futures in an Urban Forest School, *Children & Society*, 2024, doi:10.1111/chso.12901.