

# Through Your Eyes

*Colms of grass seeds brush against your knees as you walk through a paddock on an autumn afternoon. Korimako and pīwakwaka twitter through a proud kānuka that stands atop the hill, jostling to escape the wind as it blows in from the coast. Field mice squeak as you near, rushing into the gorse. You're tired, and your legs ache softly as you reach the slope and begin the climb towards home. The ground sinks under each step with a soft squelch. Before today it had been raining for over a week now, and the autumn sun has done little to dry the earth.*

*You pass by the kānuka as you reach the top, careful to give it some berth. Many years ago you rolled into the twisted mat of thorns at its base and can still remember the sting of antiseptic in the wounds. Soon enough the whole paddock will be covered in gorse, and you'll need to find a different way home. For now though, you take a deep, satisfied breath as you look down to the coast. The birds have calmed, and only the wind coaxes a sound from the field with the gentle rustle of grass blades. For just a moment, you feel utterly, peacefully alone<sup>1</sup>.*

*As you stretch with a soft smile and turn away, the wind picks up once more, pulling seeds from the capsules that coat the kānuka and scattering them over the paddock.*

## 1 - Footnote: **Our Eyes**

Isn't it interesting how we can feel alone with so much life around us?

What is it that makes us think that a forest is lonely?

Or a beach?

We often only engage with the world on our own terms. Our senses are so fundamental to our experiences, our very memories encoded by them, but we fail to recognize that the same must be true for others in this world. More so – we fail to recognize that different senses and perspectives would necessarily create a different experience.

Plants in particular are often misunderstood. They are a backdrop, a set dressing, a resource to be used. In many ways, our world is built by us to forget their needs. We will happily craft plants out of plastic to create the illusion of their presence instead of actually trying to understand the world **through their eyes**. In this, we lose a pool of knowledge and understanding as deep as life itself.

What if we could see the world through their eyes? What would we look like to them?

# Through Their Eyes

*You have a brief, utterly confusing moment as you tumble away from your cradle. Everything you've come to know is changed, and everything within you roars to life. Then just as quickly as it had started, it stops.*

*You land in a good place. The soil around you is bountiful and welcoming, with plenty of nutrients and light<sup>2</sup>. As the nights pass, you notice them becoming longer, and so you settle in for the winter. The mycelium hums about you, touching, probing, asking all sorts of annoying things like 'can we eat you?'. You roll over and tell them that you're not interested, and they politely swirl around you instead. For now, you rest. You listen.*

*The nights stretch out before you, racing one past the other in a kind of dance. At first they burst through the sky as hungry clouds of grey, the cold seeping into you and deepening your sleep. The icy moment passes and warmth begins to return to you. The nights grow shorter, and the days begin to peacefully sway across the sky. A night passes that makes your body race. You wake from your sleep. The water around you is waiting. It's time<sup>3</sup>.*

## 2 - Footnote: **Their Eyes**

Even as a seed, a plant knows itself.

A plant does not have eyes. It does not have ears, noses, tongues or skin. A plant does not even have nerves with which to feel. Yet a plant knows up, and any other direction from it. A plant knows light far beyond what we can see with our own eyes. It can feel wetness gradients with an intense sensitivity, and the difference between a stone and brick wall. It knows the length of the night, and the passage of time (Raven, pp. 660-682). A plant knows friend from foe, pressure from pain, and now from then.

## 3 - Footnote: **Time**

Time would look almost unrecognizable to us from the perspective of a plant. It is still the ever forward march as it is for us, but nowhere near constant, and so much faster. Time flows by the movement of atoms, the work of enzymes and the breaking of bonds. The faster you can go, the slower time feels. In the cold, time is fast and days pass as a blink. In the heat, time is patient, and will flow with a gentle lull as you go about your busy day (Raven, 628). A plant can also control this, slowing its own metabolic processes to allow months to pass with ease, all while maintaining a stable measure of time (Raven, 666). A seed experiences time as a series of racing moments, blinking lights and passive systems, waiting for the alignment of its needs to come and raise it from its deep slumber (Raven, 671).

*As the first drips of warm red light stream from the sky above, you crack your shell and stretch out eagerly. You feed voraciously on your husk as you do. It's quite the treat. You reach forwards, and the mycelium sings with excitement, touching against you as you move through the soil. You open a new sense<sup>4</sup>, and feel the weight of gravity in your limbs. You turn them apart, your shoot stretching up towards the surface while your root pushes ever down, met by a tangle of fungi bearing gifts of bountiful food to replace the now seemingly meagre supply in your seed. You are lucky to have landed where you have, there are others watching over you<sup>5</sup>.*

*You turn your attention upwards. Your leaves unfurl to subtle light. Through the mycelium you can feel the plants around you. There's mostly shallow roots on them, but they still tower over and around you as you are now. You'll have to climb, and so you race upward as fast as you can, stretching your leaves wide to catch the dappled sun. You begin to feel the rhythm of life around you. The chitter of creatures, the bursts of sunlight, the hum of the forest. It's such a busy place to be, so very noisy. You feel a nearby plant die as a creature tears through the forest, and you turn to the sun left in its wake.*

#### 4 - Footnote: **Stimulus**

Humans are more or less born with our senses. It takes some time for them to fully develop, of course, but we don't have to grow eyes if light just happens to come along. Plants are very different. They are able to differentiate their cells much more freely than us, and so can actually activate senses in response to stimuli (Raven, 664). Somewhat backwards, no?

Imagine what it would feel like to develop a keen sense of gravity in your fingers suddenly, or a patch on your nose that could see x-rays. What must it be like to experience a new sense? I'd imagine it would be overwhelming, but I guess that's the benefit of not having a nervous system, it's easier to localize experiences (Raven, 661).

#### 5 - Footnote: **Mycelium**

Most people are probably aware of the mycelium as a concept. It's webs of fungi in the soil, basically. 'Fungi' and 'webs' being incomprehensibly large plurals. What most people probably don't know is how truly connected and co-operative plants are with the mycelium. For plants, fungi are the arteries of their world. They literally grow inside each other, to transfer nutrients, hormones, and information throughout and between plants and fungi (Raven, 278-316, 720-722). Some plants can't even grow without it, making them near impossible to grow in a pot (Raven, 312). In this way, no plant within a network is truly alone, or dead. In the same way that a plant is not lost if its leaves are, a forest becomes this kind of immortal thing. When one plant dies, its form simply becomes a reservoir of new life, and a cluster of new mycelium.

*But then you feel it, that dreadful strain. It's cold again. The water from your roots struggles through your veins, unable to pull itself through<sup>6</sup>. The light is growing dimmer by the day, and the days begin to race by you faster and faster. You wish you'd have grown more, and you wonder if you'll see another summer. Even the mycelium slows, as the watchful trees nearby sleep for the winter. In time, you too sleep.*

*You do wake up, and stretch your leaves out thirstily for the drops of sunlight that trickle down to you once more. You've had your shoot eaten while you rested, but with the ever warming days you replace it with two. You push deeper down and higher up, breaching through the nearby plants and finally gaining fresh light above. Gradually the winter comes again, but you rest easier this time. Your wide root holds supplies, and before you know it the days are lengthening once more.*

*The summer that comes after brings a special life to your branches, and you cover yourself with a stunning coat of snow-white flowers, offering a bounty to the creatures around you. You finally understand the trees. You understand the forest. Together you shower the soil in seeds and wait patiently to see which wake with the coming spring.*

*A creature rests against you, pressing its branches into the soil. You hear a rapid beating in its trunk. Creatures are often so fast, so fleeting, but this one stays. The beating becomes slower and slower. Its branches sink deeper and deeper. Finally, it too joins with the forest, and you feel its life dance away through your body. You can feel its patterns dissolve around you, bringing with it new life, which you gently guide towards one of your seeds. You find it funny that a creature like this feeds on the forest. It's a strange thing, you think. A strange little thing with a strange little life.*

#### 6 - Footnote: **Transpiration**

A lot of what a plant does is much like transpiration.

When you think of a pump, or a tap, you're probably thinking of water being pushed through something. Inside a plant, water is pulled, but there is no organ in a plant that pulls it. Plants are more like dams, in a sense, they just guide the water where it was going to go anyway, and take a little energy from it as they do. Water in the soil wants to get back to the clouds, but evaporation is a tough process, and a very slow one, and so plants offer an easier path that just happens to go through their bodies exactly how they need it to (Raven, 709), like if our hearts were hooked up to rivers.

Plants do basically everything in this passive way, from photosynthesis to the direction of their growth. They only act when this stops working, like humidity changes or something damages them. Even while sleeping, a human is burning some 50 calories an hour (Pacheco), but a plant doesn't even have to lift a finger to make those calories in the first place.

*The rhythm of life around you begins to sing, as seasons and years and cycles pass as a dream. A seed takes root unlike any other you have known. It grows slowly, patiently, and ever stoic, until one day it reaches far above yourself. More and more they grow, until you are reminded of those days so long ago when you lived your life in the shade. Gradually, the forest begins to change, and you feel your time within it coming to an end<sup>7</sup>.*

*Year after year, you scatter your seeds into the wind in the hopes that they will land in a good place. One day you fall, and your life dances away through the forest.*



#### 7 - Footnote: **Succession**

Perhaps the most important thing about a forest is its ability to change. A single plant must grow where it lands, it cannot move even an inch to find better soil, but a forest creates a world of its own as it grows, it shapes the very soil (Raven, ch. 31 p. 17). Some plants can only thrive in an early forest, clinging to bare rock, others can only thrive under the canopy of a thousand trees. This is the life of a forest, and the means of their return to the places we have most damaged (Rola and Osyczka).

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