

Becoming Native? The Wisdom of Plants in Margarita Engle's *The Surrender Tree*

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This paper situates Margarita Engle's verse novel, The Surrender Tree: Poems of Cuba's Struggle for Freedom (2008), in both the historical context it depicts (the various wars against Spain 1850–99) and the emerging field of human-plant studies (HPS). Noting that Cuba's indigenous population was destroyed by genocide and imported illnesses, the paper suggests that the island itself, as portrayed in Engle's poetry, has colluded in human politics and played an active role in determining who can lay claim to Cuban nativity. Human-plant studies provide a rationale for suggesting that, in Engle's The Surrender Tree, the flora of the island determines the progress of the wars of independence. This argument is extended to crystals, which also 'grow' but which are not deemed to be 'living', to suggest that, in The Surrender Tree, it is not the people who choose their nation and fight for its independence or to maintain Cuba's connection to an empire of nations, but rather that the island itself chooses its people.

Key words: *Human-plant studies, Margarita Engle, Cuban literature, crystal studies, national identity*

Animals and plants help me learn
how to understand all the ways of knowing
what people are trying to say.
(Engle 53)

Los animales y las plantas me ayudan a aprender
Cómo entender todas estas formas de interpretar
Lo que la gente intenta decir
(Engle 235)

INTRODUCTION

In her poetic exploration of Cuba's struggle for independence – *The Surrender Tree* – Margarita Engle uses the historical figures of Rosario Castellanos Castellanos (known as Rosa la Bayamesa) and her husband, José Francisco Varona, as her primary vantage points to express the intimate connections between the Cuban peoples and their island home. Set in the turbulent period of 1850–99, this collection of poems weaves a narrative through Cuba's verdant

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landscape, as Rosa uses herbal remedies made from wild plants to cure the victims of the three wars fought.¹ This YA novel is published bilingually (English and Spanish) and the poems reflect various characters' perspectives, each capturing the here-and-now lived experience of that person. As freed slaves, Rosa and José are clearly aligned with the Cuban peoples against the Spanish, who do not recognise the Cuban landowners' right to free their slaves. Nevertheless, readers see Rosa's commitment to healing and how her certainty that her gift for healing comes from God leads her to treat her enemies as well. Some of those whom she treats change sides as a result of her healing acts, but the aptly named Lieutenant Death continues to hunt her even after she has saved his life. The novel concludes with the arrival of Americans – more specifically, troops of Native Americans and African Americans as well as soldiers of European descent who have been racially segregated – and the realisation that Cuba has ousted the Spanish only to be colonised by America. The Surrender Tree of the title is the site where the Spanish flag is lowered and the American flag is raised. José, watching this, observes, 'Our Cuban flag / is still forbidden' (Engle 156).

Rosa's treatment centres are referred to as 'green hospitals' and her herbal cures as 'green medicine' (*la medicina verde*), which the epilogue informs us is still common in Cuba today. The connection between Rosa, her cause and the plant life of Cuba will be examined in this paper. Drawing on a recent development within eco-criticism – human-plant studies (HPS) – I wish to examine how connections with indigenous plant life can form the basis for understanding concepts of human indigeneity and nationhood. Cuba is an island nation, which means that its borders are clearly defined by the sea. At no point in its complex history have Cuba's borders been questioned, but the issue of who should be considered a 'Cuban' is a more thorny issue. The earliest known inhabitants of Cuba were the Guanajatabey, who were driven west by the arrival of the Taíno and Ciboney, sub-groups of the Arawak cultural group who are commonly considered the indigenous people of the Caribbean archipelago (Staten 1–10). With the arrival of the Spanish and consequent warring with other European nations, primarily the British, as well as with those who inhabited the islands, the entire Guanajatabey population and almost all the Arawak were killed, and those who did survive largely fell victim to imported diseases such as smallpox and measles. Thereafter, the majority population was composed of slaves (most of whom originated from eastern Africa but also, largely due to British involvement, included those of mixed origin from other areas within the Caribbean as well as indentured labourers from India and China) as well as their European owners (Crowin). In a nation populated entirely by those whose claims to indigeneity are dependent on the time of their ancestors' arrival, the concept of what makes a person 'native' becomes a moot point. By drawing on human-plant studies, I will suggest that, in Engle's *The Surrender Tree*, the flora of the island determines who can be deemed a Cuban native. I begin by outlining the main principles of human-plant studies and then examine how the poems in Engle's novel concretise these relationships and present the flora of Cuba as active entities in determining the outcome of the various wars fought in the name

of Cuban independence. I also extend this argument to crystals, which also ‘grow’ but which – unlike plants – are not sentient and cannot be imported. My goal is to suggest that, in *The Surrender Tree*, it is not the people who choose their nation and fight for its independence or to maintain Cuba’s connection to an empire of nations, but rather that the island itself chooses its people.

A VEGETABLE WORLD VIEW

The cleverest plants in the world are rice and wheat for they have colonised the human race, forcing them to tend to their every need as they spread their genes all over the planet. The capacity of plants to dictate human actions is perhaps even more obvious in relation to apples and potatoes, plants which, unlike rice and wheat, will not grow true from seed. The reproduction of a Golden Delicious apple or a King Edward potato is dependent on human intervention, as these cultivars cannot produce offspring that resemble their parents: they are reliant on humans grafting and nurturing sections of their parents’ branches or tubers. And how willingly humans engage in this form of subjection to the plants’ desire to spread their genes! By producing a large, sweet, well-textured fruit or flavourful, fluffy flesh, the Golden Delicious and King Edward have spread so widely around the globe that there are few supermarkets that do not present these genes for consumption, even though they are genetically so weak that they easily fall prey to various forms of blight (which is why varieties such as Royal Gala have become more popular). Perhaps even more remarkable is the tulip, which also will not grow true from seed. The tulip offers us nothing of nutritional value – in fact it is mildly poisonous – but offers only the beautiful shape of the flower head and the strong colours of its petals. Beauty alone has turned humans into drones willing to add nutrients such as bonemeal to the soil (literally sacrificing animals for the beauty of the flower head!), as well as acting as guards who protect the precious blooms from flora with less desirable features (‘weeds’) and pests. Yet such is human arrogance that we usually perceive ourselves as being the primary actors in the vegetable–human relationship. At the kernel of HPS is a reversal of this perception: in HPS, the plant is deemed to be the primary actor.

John Charles Ryan, who coined the term ‘human-plant studies’, asks what would happen if we ‘were to consider how plants *act upon* us, contributing to the co-generation of our cultural practices, values, perceptions, relations, artifacts, and all else through their volitions in the *umwelt* of which all living things are part?’ (‘Passive Flora?’ 104). The humble tomato illustrates the symbiosis of plant and human life: the seeds are so delicious that we willingly eat them and so ensure that the plants’ offspring will germinate in a rich bed of organic substance produced by the human digestive tract. This intimate relationship between plants and humans also opens up new ways of thinking about social history and literature.

Cuba’s turbulent history is a perfect case in point, as the battles fought by the European nations and then America for dominance in the Caribbean were

primarily fought over plants. The desire for plants such as ginger, sugar cane, indigo, sweet potato, cassava, tobacco and cotton – all of which are indigenous to the region – was the root cause of all the wars fought in the Caribbean basin from the arrival of Columbus onwards. Indeed, it is no exaggeration to say that the slave trade itself was established in order to provide the desired plants with the care they needed in order to produce their desired bounty and the intensive labour involved in harvesting it. Humans have literally been turned into the slaves of plants.

In *The Botany of Desire*, Michael Pollan identifies four principle human desires which have shaped human–plant relations: sweetness, beauty, intoxication and control, which he discusses in relation to the apple, the tulip, marijuana and the potato. The same desires lie beneath each of the main Caribbean crops which Europeans wanted to colonise: ginger and sugar cane exploited human desires for sweetness and spice; indigo provided affordable clothing dye to a region starved of the beauty of colour; tobacco's sole function was to intoxicate, a function shared with sweet potato and cassava, although these were primarily grown to fill the stomach; and cotton provided comfortable fabrics. Somewhat curiously, Pollan ignores the medicinal value of plants, touching only briefly on the capacity of marijuana to numb pain and serve as a medicine in the treatment of those suffering from diseases such as cancer and multiple sclerosis. Nevertheless, the world of pharmaceuticals is almost entirely dependent on plants for producing raw ingredients. In *The Surrender Tree*, Rosa's use of the plants found at hand differs from major pharmaceutical companies' only in the degree to which she alters the plants' forms and the proximity of the ingredients to those in need of their healing properties.

Plants, as the early promoters of organic farming Peter Tompkins and Christopher Bird famously observed, are alchemists (274–91). Citing a wide range of experimental as well as practical farming studies, Tompkins and Bird drew public attention to the capacity of plants to produce elements within the first twenty elements of the periodic table using other elements in combination with hydrogen or oxygen (274–91). For example, legumes can produce iron from manganese (279). This information flies in the face of perceived wisdom about the very building blocks on which we have assumed the universe and all it contains is formed. I am not suggesting that plants have a conscious awareness of the processes by which they disturb the table of elements, any more than humans have a conscious awareness of their own production of differing chemical compounds evident in the formation and repair of bones or in 'waste' products such as faeces or urine. However there are areas of plant activity that indicate both sentience and intent: movement and signalling.

Plants are generally referred to as 'growing' rather than 'moving'. When plants are referred to as moving, the activity is connected to outside forces such as the wind. But anyone with an ounce of humility must concede that 'growing' is simply a slow form of movement. In fact, sometimes the movement of plants is pretty fast – perhaps most obviously in climbing plants such as beans, hops and vines. During the growing seasons, these plants move so quickly that gardeners

and farmers have to tie the shoots daily. Commenting on this phenomenon, Tompkins and Bird observe

A climbing plant which needs a prop will creep toward the nearest support. Should this be shifted, the vine, within a few hours, will change its course into the new direction. Can the plant see the pole? Does it sense it in some unfathomed way? If a plant is growing between obstructions and cannot see a potential support, it will unerringly grow toward a hidden support, avoiding the area where none exists.

Plants, says Francé, are capable of *intent*: they can stretch forward, or seek out what they want in ways as mysterious as the most fantastic creations of romance. (xi, italics from the original)

The movements of plants may be slower than those of animals, but they are intentional.

Tompkins and Bird's book had a profound impact on cultural perceptions of plants, even though many of the studies they cite have been discredited to such an extent that some biologists claim that research in the area of plant intelligence has stagnated as a result (Pollan, 'The Intelligent Plant'). More recently, Karpiński and Szechyńska-Hebda (2010) have investigated plants' perceptions of light and concluded that plants have both memory and intelligence. Their study was published in the rigorously peer-reviewed journal *Plant Signaling & Behavior* (established 2005), a forum providing cutting-edge scientific evidence on the physiological and neurobiological basis of adaptive behaviour in plants. These studies demonstrate that plants have an impressive array of mechanisms for perceiving and responding to their environment, mechanisms that in animal contexts are deemed to indicate sentience and intent.

Among the most controversial findings in plant research cited in Tompkins and Bird is the claim that plants can tap into human emotions. This finding, known as the 'Backster effect' after Cleve Backster (1968) who developed a means of measuring plants' responses to human thoughts and feelings, has been duplicated but not consistently and so the scientific veracity of these claims cannot be taken at face value. As already noted, however, the impact of these claims on popular culture has been significant and has found its way into works as varied as *The Rocky Horror Picture Show* and J. K. Rowling's Harry Potter series, where plants such as Devil's Snare respond to human emotions. *The Surrender Tree* also suggests a connection between human emotions and plant behaviour but resonates more closely with the work of the phosphor chemist Marcel Vogel who took Backster's research a step further by extending the same principles to animals and minerals.

Vogel began his research career in the field of luminescence, more specifically with glow worms and fireflies, and he developed a number of products, including some using crystals to which I shall return later in this paper, that are still valuable in the manufacturing of televisions and computers today. In the 1950s, he sold his company to IBM but continued to work with them, his duties including organising a workshop on creativity in which he challenged his students to replicate Backster's findings. He was the only one who managed

to do so. Drawing on his experience as a hypnotist, Vogel attributed his success to psychic energy. He then developed a series of studies which demonstrated with increasing complexity the power of human–plant relations. When humans attuned themselves to a particular plant, they could will it into well-being, but they could also offend it. The plants could identify those who wished to harm them and could distinguish between real intent and pretence (see Tompkins and Bird 17–32 and the Vogel Crystals website for summaries of Vogel’s work).

The plants on which Vogel conducted his research came primarily from the philodendron family. The name ‘philodendron’ comes from the Latin *philo* – ‘love’ and *dendron* – ‘tree’, and one of these ‘love trees’ – *philodendron lacerum* – is native to Cuba and Jamaica, as is another favourite of researchers in this field: *mimosa pudica* ‘the sensitive plant’, which rapidly folds inward and droops when touched. The plants which surround Rosa and José in their jungle hospitals are among those that have been identified as being most sensitive to human thoughts and feelings. Furthermore, Rosa uses the light of fireflies to lure bats away from the caves and to reflect into the crystal walls; she is in tune with the flora, fauna and minerals of her island home.

Even if one does not wish to enter the world of psychic energy, there remains a wealth of more traditional research in the plant sciences, which Ryan argues demonstrates that ‘the differences between plants and creatures normally regarded as sentient are neither as profound as previously thought nor as substantial as purported for maintaining the predominant attitude towards plants as disposable materials, ecological automatons, or static backdrops to human desires’ (‘Passive Flora?’ 104). Thus when I argue that the Cuban vegetation is playing an active role in supporting Rosa in the struggle for independence, I do not mean this solely on a metaphorical level. Rosa and José are ‘tuned in’ to the vegetable world, and they have learned the names of flowers.

THE NAMES OF FLOWERS

Plants are usually classified according to the Linnaean system developed by Carl Linnaeus in the eighteenth century. The primary purpose of this classification system, Ryan observes, is to produce a universal system which can ‘transcend cultural, regional, and linguistic specificity’, and so enable people around the world to be able to refer to their lived environment in the same way (‘Cultural Botany’ 6). It also enabled botanists to establish evolutionary relationships before the emergence of DNA technology. The categories in the Linnaean system are generated from the plants’ appearance and their means of reproduction without reference to the physical environment in which they grow, and so it is deliberately context independent. It is a hierarchical system that starts with three kingdoms (animal, mineral, vegetable) which are divided into genera (‘genus’ in the singular) and thence into species. It is worth noting that Linnaeus’s *Systema Naturae* (1735) also divided human beings into four species: *Europæus albus* (white European), *Americanus rubescens* (red American), *Asiaticus fuscus*

(brown Asian) and Africanus Niger (black African), a classification which has been blown apart on ethnographic, ethical and DNA grounds, although Linnaeus's ground-breaking assertion that humans are animals and are members of the genus 'mammal' species 'primate' still holds today. Equally, the Linnaean system for classifying minerals was abandoned in no small part due to the creation of the periodic table, which, as I already noted, is challenged by the finding that plants are capable of producing elements within the table. Despite its abandonment on many fronts, the Linnaean system still underpins our everyday thoughts about plants.

Ryan questions this established taxonomy and the reductionism of dissecting the living body into its constituent parts ('Cultural Botany'; 'Passive Flora?'). Drawing on a broad range of historical material, Ryan demonstrates that prior to Linnaeus's taxonomy 'knowledge of plants was intimately linked to the human body through herbal medicine' ('Cultural Botany' 4). His evidence includes some of the bestselling works of the Renaissance era, including Nicholas Culpeper's *The Complete Herbal*, first published in 1653, which encourages readers to apply a range of senses (touch, smell and taste as well as sight) in determining which plants are likely to prove most effective in the development of medicinal compounds such as poultices and elixirs. In contrast, the Linnaean system relies exclusively on the visual appearance of the plant, as it 'ushered in abstracted universalised methods of classifying plants based on embedded notions of gendered power relations' ('Cultural Botany' 6). Even at the time, Linnaeus's work was questioned by a Swiss naturalist, Albrecht von Haller, who 'argued for the role of geography in understanding flora and that temporal changes over time are as crucial as morphological anatomies fixed in a single synchronic moment of perception' (Ryan, 'Cultural Botany' 7). This determination to separate the vegetable world from the very ground in which it flourishes is part and parcel of a larger project of assuming that plants are passive and that humans are always the active partners in determining human-plant relations.

In Engle's *The Surrender Tree*, Rosa's classification of plants rejects the Linnaean desire for decontextualisation: her knowledge is deeply contextualised, local and specific. She classifies the plants according to their medicinal properties, linking the vegetation (herbal remedies) to the animal population (humans) of the jungle through her actions. Like Culpeper, she understands the regional flora in relation to the powers the plants possess as well as learning how to find them, which demands seeing the world from the plants' perspective: where would such a plant flourish?

In the first section of the novel, 'The Names of Flowers', Rosa learns to classify the vegetation in the environment in which she was born in terms of human-plant relations. She watches the women gathering wild plants to cure the sick, and then we learn that the sick people she has been treating are *cimarrones*: runaway slaves from the coffee groves and sugarcane fields. The opening poem focuses on the art of producing herbal medicines and the metaphor of the bee is used to highlight the process of alchemy: changing one substance into another.

Some people call me a child-witch,
but I'm just a girl who likes to watch
the hands of the women
as they gather wild herbs and flowers
to heal the sick.

I am learning the names of the cures
and how much to use,
and which part of the plant,
petal or stem, root, leaf, pollen, nectar.

Sometimes I feel like a bee making honey –
a bee, feared by all, even though the wild bees
of these mountains in Cuba
are stingless, harmless, the source
of nothing but sweet, golden food.
(3)

Algunos me llaman niña bruja,
pero tan sólo soy una niña a quien le gusta observar
las manos de las mujeres
mientras recogen hierbas silvestres y flores
para curar a los enfermos.

Aprendo los nombres de las curas
y cuánto debo usar
y qué parte de la planta,
pétalo o tallo, raíz, hoja, polen, néctar.

A veces siento que soy una abeja que hace su miel:
una abeja, temida por todos, aunque las abejas alavaje
de estas montañas de Cuba
no tienen ponzoña, son inofensivas, tan solo son la
fuente
de un alimento dulce y dorado.
(181)

Rosa's knowledge is both contextualised and purposeful from the very beginning. As she likens herself to the bee, the first association is with business and productivity, then to how she is incorrectly deemed to be a source of danger and finally to alchemy, as one product – nectar – is transubstantiated into honey. These three aspects of her engagement with plants dominate the entire narrative. Rosa – named after a plant desired solely for its beauty, a plant which will revert to the wild form if the human-made graft is not cared for correctly – is industrious as she forms her hospitals and works unrelentingly for the good of others, despite her personal exhaustion. She continues to learn names throughout the novel: the names of those whom she treats and the names of plants in the languages of those she treats. She is not imposing her names onto the plants or people – as Linnaeus does – but rather learning the plants' and people's own names, learning their own language. Her broad knowledge is based in the here-and-now of the war, and its situatedness is the key to her success, which leads to her being perceived as dangerous. Rosa's alchemy – turning petals into weapons of healing – causes her to be dubbed 'the witch' by Lieutenant Death.

ROSA'S *MEDICINA VERDE*: WITCHCRAFT AND ALCHEMY

When Rosa compares herself to a Cuban bee, her knowledge of the insect is deeply contextualised. She knows that Cuban bees do not sting, but those who pursue her do not know this. In the section depicting the War of Independence, bee hives are used to trick the troops into fleeing (136). They fear her 'magic' powers as, like an alchemist, she develops medicines from her surroundings. She

is not consistently successful and must learn the healing powers of each plant separately.

One flower cures	Uno flor cura
Only certain fevers.	Sólo ciertas fiebres.
We try another.	Probamos con otra.
We fail, then try a root, leaf, moss, or fern	Fallamos, entonces probamos con una raíz, una hoja,
One petal fails.	Musgo o un helecho
Another succeeds.	Un pétalo falla.
(42)	Otro triunfa. (235)

Unlike Linnaeus, Rosa classifies plants in terms of what they *do*: their ability to cure. They are ascribed subjectivity – ‘one flower cures’ – and they are the actors who determine who will be cured and who will not: ‘another succeeds’. By working in harmony with the powers latent within the plants – by learning the language of the flora – Rosa’s powers are increased. Rosa’s weapons in the struggle for independence are simply petals – ‘armed with fragrant herbs, / fighting a wilderness battle, my own private war / against death’ (27). Rosa’s enemies, unable to understand her symbiotic relationship with the plants, ascribe to her person all the power she gains from working with Cuban nature rather than seeking to control it: she is a witch.

The first time Rosa is referred to as a witch is in the context of Lieutenant Death’s search for her as he plans to kill her and reap financial reward. He hears her singing, he sees her shadow but he cannot catch her because ‘She vanishes, / just like the maddening / morning mists’ (43). Rosa too acknowledges that she and José are ‘invisible’ whereas ‘The Spanish soldiers dress in bright uniforms, / like parakeets’ (33). Cuban parakeets (*Psittacara euops*) were prolific at the time in which Engle’s novel is set but are now an endangered species due to the loss of natural habitat and trapping for the pet trade. These noisy, chattering birds draw attention to themselves, just as the noisy, brightly coloured soldiers warn Rosa and José of their approach and enable them to slip away undetected. The metaphor highlights why it is so easy for those in tune with the landscape to remain hidden, but at the same time the use of a native bird as an image allows for the possibility for soldiers to join the resistance movement, as indeed some do.

When Rosa associates herself with the fauna of the island, she again picks up the notion of language and how she creates secret codes ‘but the ones taught by birds are best’ (53). The bird she admires most is ‘*un sinsonte*, / a Cuban mockingbird’ which can pick up others’ songs and express mixed emotions (7). Rosa does not impose her language on the flora and fauna: like the mockingbird she admires, she learns the languages of the indigenous species, a point which is also picked up in the citation in the epigraph to this article.

Animals and plants help me learn
 how to understand all the ways of knowing
 what people are trying to say.
 (53)

Los animales y las plantas me ayudan a aprender
 Cómo entender todas estas formas de interpretar
 Lo que la gente intenta decir
 (235)

In this formulation, human relations with animals and plants are reversed: the flora and fauna of Cuba are the actors who provide the knowledge Rosa needs to understand the people she meets. Rosa was born into slavery; unlike the plants and animals she learns from, she is not indigenous to Cuba. But by learning the language of the living creatures that are indigenous – the native plants and animals – she is better equipped for survival.

HPS is based on combinations of biological research with literary, philosophical and cultural enquiry. It is committed to highlighting the active nature of the vegetable world, not as a metaphor but as a lived reality. *The Surrender Tree* celebrates this symbiotic relationship and takes a further step by suggesting that the mineral substance of the island also colludes in choosing to support Rosa and José's cause over that of the Spanish and American colonisers.

CRYSTAL HEALING: CUBA'S CAVES CHOOSE THEIR INHABITANTS

Many of Rosa's hospitals were located in crystal caves, features for which Cuba is famous. The Bellamar Caves are not mentioned by name in *The Surrender Tree*, although they were officially discovered by a Chinese workman in 1861, some seven years before the start of the three wars during which Rosa's hospitals were in operation. The tourist guides claim that these are Cuba's oldest tourist sites but, in *The Surrender Tree*, the 'caves of sparkling crystal / hidden behind waterfalls' are first mentioned as being places where escaped slaves (*cimarrone*) live (4). Later in the novel, Rosa visits these hidden caves and establishes her hospitals there. The novel clarifies that there are many caves, an entire underground network (in both the literal and figurative senses), whence those fighting the Spanish can move from place to place to avoid being detected. Intimate knowledge of the land provides Rosa, José and their cause with sanctuary: the island of Cuba protects those who know her best.

We are forced to escape, move our patients, hide,
 find a new home, new hope, a new cave . . .
 although clearly, this one too is ancient –
 every wall and spire of crystal
 bears the marks of other fugitives,
 people who hid here –

Estamos obligados a escapar, a transportar a nuestros
 pacientes, ocultarnos,
 encontrar un nuevo hogar, una nueva esperanza, una
 cueva nueva . . .
 aunque está claro que ésta también es antigua:
 cada pared y cada aguja de cristal,

people who left
 their handprints on stone.
 (60)

lleva la marca de otros fugitivos,
 Gent que se escondió aquí
 hace mucho tiempo;
 gente que dejó
 su huella en la roca.
 (243)

The image of the handprint and the idea that the energies and memories of others who have hidden in the caves are repeated throughout the novel. For the most part, the images are positive (I shall turn to the few exceptions later), moreover they present the crystals almost as though they, like the plants, were sentient. To the best of my knowledge, no one has ever suggested that crystals are living, but they are undeniably sources of energy. The quartz stalactites and stalagmites which form the ‘spires’ that Rosa observes grow slowly over time as mineral rich water drips and dries, making ‘a sound like quiet music’ (153) as they grow and increase their capacity to conduct energy and provide light.

The word ‘crystal’ comes from the Greek word *krystallos* which means ‘frozen light’. The caves in Cuba are mostly decorated with quartz crystals. Quartz is formed when silicon and oxygen combine to form silicon dioxide (SiO₂). Since these ingredients are fairly common and quartz does not require a particular temperature for its creation, quartz is one of the most common elements on earth and it forms easily underground. It is also easy to produce quartz artificially, and most industrial quartzes are man-made. Quartz is used for a broad range of purposes, but the most relevant for my current discussion is to store information and conduct energy. Even those who are sceptical about the powers of crystals to heal would be hard put to explain the use of quartz crystals in computers, cell phones, navigational equipment and other devices if they were not such effective materials. Marcel Vogel – the IBM scientist who worked with fireflies and philodendrae – also utilised quartz crystals within both information technology and healing. His Vogel-cut crystal is still widely used for healing purposes.

Judy Hall, who is committed to the notion that crystals have healing powers, describes quartz as ‘*An excellent healing stone, [which] widens the subtle energy field or aura. [...] Quartz can heal, protect, attract wealth, enhance intuition, and disperse negativity*’ (63, italics original), and she also comments on the capacity of quartz to amplify and radiate energy. In *The Surrender Tree*, Rosa never directly uses crystals for healing although she clearly resonates with their presence in the caves and they are described in language which suggests that they are supporting her.

When she first arrives in the caves, Rosa hums to herself, and the sound resonates off the walls, magnifying her energy, making her sound ‘so much braver and stronger / than I feel’ (49). Those like Hall and Vogel, who impute healing powers to crystals, suggest that there is a symbiotic relationship between living creatures and crystal energy. More specifically, they suggest that crystals

can pick up negative energies and so need to be cleansed. Vogel advocates breathing onto the crystal whilst thinking positive, healing thoughts (Vogel Crystals website), whereas Hall recommends a range of possibilities, including placing them with a positively charged quartz, leaving them in moonlight, using them with plants or ‘smudging’ (fanning the crystal with the smoke of burning herbs or incense) (15). Although Rosa does not use the crystals as healing agents, she engages in each of these practices. Her humming is the most obvious, but we also see her moving fireflies in the moonlight, bring plants into the caves and the effects of fires on the crystal walls.

Whether or not there is any scientific basis for believing that human and crystal energies are symbiotic in the way that human–plant relations are, Engels uses the idea of storing healing or evil energies in the crystal walls to suggest that Cuban spaces are particularly attuned to the needs of her people. Early in the novel, Rosa describes how the caves have picked up the negative energies (or memories) of the escaped slaves who have sheltered there before.

and these crystals, these archways and statues,
 these flowers of stone . . .
 shadows, pottery, bones . . .
 the skeletons of those who hid here
 so long ago, when I was a child,
 when I was a slave . . .
 (62)

y cristales, estos arcos y estatuas,
 estas de piedra . . .
 sombras, alfarería, huesos . . .
 los esqueletos de quienes se escondieron aquí
 hace tanto tiempo, cuando yo era una niña
 cuando yo era una esclava . . .
 (245)

Rosa repeatedly recalls the presence of runaway slaves whilst she is in the caves, and this helps focus her sense of purpose. By recalling the era of slavery, she renews her determination to continue healing. She adds her own history to the spaces: ‘I leave my handprint on glittering crystal / beside cave paintings made in ancient times’ (51). She also brings light into the cave. The crystals ‘glow in the light / of . . . living fireflies’ (48). The light of the fireflies is connected to Rosa’s personhood. When José sees her leading the bats away from the crystal caves with her gourd of fireflies, he describes the bats as ‘follow[ing] her light’ (35). Unlike Florence Nightingale – ‘the lady *with* the lamp’ – Rosa herself is presented as *being* the source of light: ‘her hands of light / lead [. . .] the bats far away’ (35). We also see her passing on her skills to a refugee child, Silvia, who must learn to see the caves as Rosa does, as well as the flora and fauna (114). Because so much of her healing takes place in the crystal caves, the caves themselves become agents of healing. Like the plants, they are actors in Cuba’s struggle for freedom.

Yet even Rosa is not capable of healing an entire island, and the few places where we see her stumble and fail are related to the mineral composition of the island. The caves may be suffused with hope and healing, but they are also imbued with ‘the stench of black vomit, / yellow fever in its final stage’ (63). The process of cleansing and healing demands great energy to overcome the desperation and suffering which are also abundant in the caves. At the beginning

of the novel, we also see the very island itself working against Rosa. As a slave girl, Rosa is hired out to travel with the slave hunter in order to heal the recaptured slaves: ‘Sharp rocks slice my face and hands. / I will be useless – without healthy fingers, / how can I heal wounds / and fevers?’ (20). It is as though the rocks have determined that Rosa should not be capable of using her healing skills to support the continuance of slavery. The rocks are active agents, slicing her hands to determine who will receive the benefit of her skills. Only once she becomes a healer for those resisting slavery does the island open up its secret, healing spaces. The island is presented as though it were sentient: Cuba’s flora and minerals actively collude in the rebellion against colonisation.

CONCLUSION: CUBA’S PEOPLE IN *THE SURRENDER TREE*

‘every leaf is a heart-shaped / moment of peace’ (25)

The novel ends with the section titled ‘The Surrender Tree’: the place where the Spanish flag is lowered and the American flag is raised. José reveals that the tree itself is the kapok (*Ceiba pentandra*), a gigantic native tree considered sacred by many of the different ethnic groups who inhabit Cuba. The website for Cuba’s organisation for biodiversity reports that ‘It is considered sacred for white, black or Asian practitioners of different learned *sincréticos*. For these last ones it is the throne of Santán Kón, Santa Bárbara’s Chinese version, and for the peasants in general the Virgin María’s Tree’ and it is also sacred within Mayan mythology. Growing to heights of 60–70 metres, with a girth of up to 3 metres, the kapok can live for up to four hundred years, easily outlasting the lives of those who struggle to dominate the soil in which it grows. The cover of *The Surrender Tree* depicts the kapok in a pool of blood held by a human hand. Both the tree and the hand are black; the hues of the red blood and the yellow background are the same as the Spanish flag. The imagery is not hard to interpret: the flora of the island has been fed by the corpses of those who have died in the battles. These battles were fought over vegetable products such as tobacco, indigo, coffee and even the kapok itself, as the fibres are used to produce filling for mattresses, upholstery and teddy bears, whilst the seeds produce soap and fertiliser. They will outlast individual humans and, in *The Surrender Tree*, they are depicted as having made their own choices about who should govern Cuba.

In contrast, José recounts how disconnected the Spanish soldiers are from the island they are endeavouring to conquer, using an image which emphasises their temporality:

We like to joke
about Spanish soldiers owning
only the small, foot-shaped parts of Cuba
beneath their own feet.
(97)

Nos gusta bremear
acerca de que los soldados españoles son
sólo dueños
de esa pequeña porción de Cuba que cubre
la suela de su zapato.
(282)

The soldiers' fleeting presence – they cease to 'own' the land the second they raise their foot – contrasts starkly with the kapok tree, the ancient crystal caves and the living forests which have chosen to support Rosa and José in their endeavours to free Cuba from its colonisers.

This argument is based on a work of literature but this way of thinking has wider implications for understanding nationhood. By putting aside questions concerning the origins of the human inhabitants, and valorising how in tune with the lived environment inhabitants are, new ideologies of nationhood become possible.

NOTE

1. The three wars incorporated into the novel are the Ten Years' War (1868–78), the Little War (1878–80) and the War of Independence (1895–8). The novel is divided into five sections: Rosa's childhood (titled 'The Names of Flowers'), the three wars and concluding with 'The Surrender Tree (1898–99)'.

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