

The Healing Mathematics of Life in a Gesture: Jean Giono's *The Man Who Planted Trees*

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Abstract Jean Giono's *The Man Who Planted Trees* gives a key to the awareness of connections between trees, the land, and all life. It shows the weight of a gesture in the revival of an apparently hostile desert, the role of an individual's action for the community, either local or global, and also the healing power of that gesture. The tree-planting performed by the fictional shepherd has echoes in reality through Wangari Maathai's action and the Greenbelt Movement and other individual or collective actions. The article tackles the importance of both a simple physical gesture and literature; it shows how one person's behaviour can make a difference and change the world.

Keywords Connections. Jean Giono. Land revival. Planting trees. Wangari Maathai.

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1 Introduction

Jean Giono wrote *L'Homme qui plantait des arbres* in 1953 for a course organised by the American magazine *Reader's Digest* on the theme "the most extraordinary character I ever met". The short story was pre-selected but not selected as the organisers had doubts about the truth of the facts told and about the existence of the central character. Later on, in a letter to the Water and Forests administrator of Digne, Jean Giono said that his character was imaginary and that his only aim was to make people love trees or more especially, to "make them love planting trees".¹ It is another American magazine, *Vogue*, that published the short story translated into English under the title "The Man Who Planted Hope and Grew Happiness". So, though written in French, the book was first published in English in the United States of America.

After being published by *Vogue*, one hundred thousand copies were published freely in the United States. The story was then published in several German magazines, and an Italian edition appeared in 1958. But it is not before 1973 that it was published in France in the *Revue Forestière Française*. Jean Giono offered his book to the world, free of copyrights. He wanted it to be as widely read as possible throughout the world, to encourage people to be the guardians of the earth by realising the weight of a gesture: planting a tree, an acorn or sewing a seed.

After being rejected a first time in the United States, and much longer in France, it became a major book in children's literature – even though Giono had not initially meant it for children – but also one of the major books in environmental literature; it is studied in schools and translated into many languages. In France, in 1983, it was published by the prestigious publishing house Gallimard with illustrations by Willi Glasauer. In 1987, an eponymous Canadian film was made by the illustrator Frederic Back and read by the French actor Philippe Noiret. This film received more than forty prizes throughout the world.² The book was published again in 2005 for the twentieth anniversary of its publication by Chelsea Green Publishing. That new edition was enriched with a foreword by Wangari Maathai, illustrations by Michael McCurdy and afterwords by Norma Goodrich and Andy Lipkis.

¹ In that letter, showing that the text should have a political function and be followed by facts, he said: "I'd like to meet you if it's possible for you, possible, to speak precisely about the practical use of that text. I think that the time has come to make a 'tree policy', even if the word policy does not seem well adapted". Letter to the Water and Forests administrator of Digne, Monsieur Valdeyron. https://fr.wikipedia.org/wiki/L%27Homme_qui_plantait_des_arbres. If not otherwise stated, all translations are by the Author

² It can be watched on YouTube: <https://www.youtube.com/watch?v=n5RmEWp-Lsk>.

Moreover, Frank Prevot echoed Giono's story by creating a children's book with illustrations by Aurelia Fronty and entitled *Wangari Maathai: The Woman Who Planted Millions of Trees* in 2017, to tell the story of Wangari Maathai, who founded the Greenbelt Movement and, with hundreds of women, planted trees in Kenya to make the desert recede. The importance of her movement was such that it frightened the government and she and many others were imprisoned, before she received the Nobel Prize for Peace in 2004.

That connection between the French writer, his imaginary shepherd from Provence, and the Kenyan biologist and professor of veterinary anatomy, who fought all her life for sustainable development, peace, and social justice through the simple gesture of planting trees, reveals the power of a simple gesture connecting human hands and the soil. A forest can revive from one single acorn planted by one solitary man, through a mathematic reconstruction of the landscape that is possible thanks to the reunion of a fruit or a seed, a piece of land and a human hand.

2 Genesis

Jean Giono (1895-1970), like Marcel Pagnol, was a man from Provence. He was born in Manosque, a beautiful city on the foothills of Luberon. Most of his works are situated in Provence, in the peasants' world. The son of a "libertarian healer"³ who hosted many outcasts and exiled people, Giono evoked his childhood and his admired father in his novel *Jean le Bleu* (1932). Having to stop going to school in order to work because of his father's bad health, he went on studying by himself. When he was nineteen he met a young teacher to whom he read the texts he wrote. This was love at first sight but they could only marry after the First World War. Traumatized by the war (he participated in the most terrible battles - Artois, Champagne, Verdun, Somme, Chemin-des-Dames), he remained a pacifist all his life. During the Second World War and the Occupation, one of his plays, *Le Voyage en calèche*, written in 1943, was banned by the German censorship, as the play evokes a country (Italy) occupied by foreign troops and it tells the story of the resistance of a young romantic, non-violent man. Giono always spoke against war. He was a novelist, essayist and poet and also wrote several screenplays and translated Melville's *Moby Dick*.

Among more than thirty novels, narratives and short stories, we can mention *Colline* (1929), *Regain* (1930), *Jean le Bleu* (1932), *Le chant*

³ Cf. Durbet-Giono, S. (2002). *Jean Giono à Manosque - Le paradis, la maison d'un rêveur*. Paris: Belin.

du monde (1934), *Que ma joie demeure* (1935), *Pour saluer Melville* (1941), *L'eau vive* (1943), *Le hussard sur le toit* (1951); some were published posthumously like *Le bestiaire* (1991) or the children's book *Le petit garçon qui avait envie d'espace* (1995); and among the essays and journalist's chronicles, *Le serpent d'étoiles* (1933), *Les vraies richesses* (1936), and *Lettre aux paysans sur la pauvreté et la paix* (1938). Giono also published several collections of poems and plays. Several of his novels were adapted for the screen. An episode from *Jean le Bleu* was adapted for the screen by Marcel Pagnol to become the famous film with Raimu, *La femme du boulanger* (1938).

The Man Who Planted Trees, even if it looks like a fable, has its roots in human and nonhuman reality as appears in the role of names. Toponymy and onomastics are important in the genesis of the book as names give the reader information about Giono's aim. The main character's name is Elzéard Bouffier. The first name is a Hebrew name meaning "God's help", which is an indication that the shepherd appears as God's hand and even at the end, as a God-like figure. As for the name "Bouffier", it may have its origin in the Occitan verb *buffo*, meaning "to blow" and generally used to speak about the wind. The insistence on the strength of the wind blowing at the beginning of the story suggests that the wind seems to have shaped the landscape.

The other interesting name is the toponym: the name of the village is Vergons, a real village situated in the Alpes-de-Haute-Provence, in a mountainous area. The place name significantly comes from an Occitan word, *vergoun*, meaning 'wicker' or 'wood stick' and it is linked with the wood of the mountain of Chamatte, which can be climbed from Vergons.⁴ The origin of a wicker bed suggesting a place close to a stream is important as the story starts with a dry landscape from which all water has disappeared. Yet there are clues suggesting that there was water at one moment:

These clustered houses, although in ruins, like an old wasps' nest suggested that there must once have been a spring or a well here. There was indeed a spring, but it was dry. (4)

The comparison of the houses in ruins with "an old wasps' nest", reinforces the idea of both abandonment and an absence of life. The end of the story shows the role of trees that allowed water and life to come back. If Giono chose this real village, it may be because he knew it, but also because of the meaning of its name implicitly con-

⁴ See Nègre 1996. Pèire Thouy, an ornithologist, confirms the etymology and gives an interesting precision: "I agree with Ernest Nègre. *Vergons* is a diminutive of *vergas*, which designates sticks or scions (most often of wicker): to my mind, *Vergons* has a collective meaning and designates a wicker bed and thus a place close to a stream". Pèire Thouy, electronic message, 18 April 2022.

taining the presence of water, that vital water whose importance is so well tackled by another writer from Provence, Marcel Pagnol in *L'eau des collines* (1963). The genesis of *The Man Who Planted Trees* takes root in the very landscape.

3 Connections Between Humans and the Land

In Giono's tale, everything is seen from the point of view of a narrator who walks through the wild places of Provence. This is presented from the start as a face-to-face between a traveller and the land:

About forty years ago, I was taking a long trip on foot over mountains quite unknown to tourists, in that ancient region where the Alps thrust down into Provence. All this, at the time I embarked upon my long walk through these deserted regions, was barren and colorless land. Nothing grew there but wild lavender. (3)

The land is presented as a barren one: "deserted regions", "barren and colorless land", "nothing grew there". There is no colour except for the lavender whose blue colour does not appear; the plant is only mentioned for its wild quality, and its absence of colour also appears as a visible symptom of drought. As the traveller walks on, after three days, the desolate quality of the land is highlighted: "in the midst of unparalleled desolation" (4), "I camped nearby the vestiges of an abandoned village" (4). The desolation of the land caused the desolation of the human space, thus showing the close connection between the two. The houses are "in ruins". Everything evokes desolation and emptiness. Everything is marked by absence: the houses are "roofless", "all life had vanished" (4). Yet there is one element of hope: the narrator says that these houses "suggested that there must once have been a spring or well there" (4). And the day is "a fine June day, brilliant with sunlight". The presence of the sun, the fact that it is June, the month of the solstice, brings light, literally. But that brief tinge of light is followed by imagery conveying the violence of natural elements: "the wind blew with unendurable ferocity. It growled over. The carcasses of the houses like a lion disturbed at its meal" (5). The land and the houses are introduced as preys to the wind and the animal imagery reinforces the notion of violence bringing about death, since the houses are seen as "carcasses". Yet, there is a break. An isolated element introduces a rupture into the image of desolation and is integrated into the landscape: "I thought I glimpsed in the distance a small black silhouette, upright, and I took it for the trunk of a solitary tree" (5). The first vision the walker has of the shepherd is "small" and "black", it is not acknowledged as a human being but taken for "the trunk of a solitary tree". From

the start, before being introduced really, the shepherd is seen as being one with the world of trees. It is the landscape that introduces him to the walker and to the reader, showing them his main characteristics: solitude and solidity in apparent fragility; he also appears in communion with trees, being rooted in the land. For the narrator, that vision is an epiphany. The “small black silhouette” mistaken for the trunk of a tree, appears as not only a shepherd, taking care of his sheep, but as the guardian of the whole land. From the start, he is integrated into the landscape and connected to trees.

4 Time to Understand Place

Throughout the story, time plays an important part. The organic time of seasons is at the origin of the landscape. And the traveller gives precise temporal indications on the duration of his journey, thus suggesting the importance of the time of the clock in the story. While telling about his journey, he reminds the reader of what happened in the country, making the time of history enter the wild landscape. The First World War - he was a soldier - and the Second World War appear in the text, briefly, as if the shortness of historical time in the text should be put in parallel with the slowness and precise description of the evolution of the landscape thanks to one man, ignoring historical time. This does not mean that he ignored tragedies, quite the contrary. Giono the pacifist, who had seen the horrors of the First World War, like the narrator, just showed how the conscience of the place where we live can change the darkness of historical human time into the light of a renewed world. When, after the war during which he saw so many soldiers die beside him, a war whose horrors are printed in him, the narrator returns to the place where he had first met Elzéard Bouffier, a place that he had discovered as a place of desolation and absence, he thinks that the shepherd has probably died. For five years, he only saw suffering and death and cannot expect to find anything but death. And yet something leads him to that place as if he was attracted to the peace he had felt there when he was with the shepherd: “There was peace in being with this man” (10). Something seems paradoxical in the narrator’s choice, if we do not understand that, however desolate, barren, lifeless that land looked when he had discovered it, it was there that he had met peace, it was there that he had been given water, and it was there that he had seen a man who would have had all the reasons to lose hope, to be as desolate as the land where he lived, but who, on the contrary, made life return. Even if it was a place marked by the ‘ferocity’ of the wind, it was associated with a moment of peace before the human ferocity of the war. The man he had met there had lost his child and his wife, he had lived the most terrible tragedies a man can live in his life, but

he had given peace to his visitor and in both his suffering and in his connection with the land, he had found the inspiration to change loss and absence into revival and life: just by the conscience that planting trees would make things change. Instead of seeing his personal tragedy and all the desolation around him as reasons to give up, he used them as a lever to lift the world, to borrow the image chosen by Archimedes: "Give me a lever long enough and a fulcrum on which to place it, and I shall move the world". Giono's character just used a small acorn, the land and his hand to change the desert into a forest, to make water flow and humans live there again. The imagined tree that the shepherd was in the narrator's perception at the beginning of the story has become the living hand making trees grow again on the land, he has been the hand on which a whole land, a whole community, and strangers in need of water and peace could rest.

The historical time of wars and human events just occupies a few sentences in the book. The time of the walk, a slow time, brings about the awareness of two things: the importance of a place, the place where he will come back to find peace, a healing ground; and the awareness of the time necessary for a tree to grow. Everything is quiet in the shepherd's way of life, his everyday life, his way of providing the stranger with water, a meal and a place to rest, his way of showing him the land and his action on the land. Exactly as he provided the stranger with the water he needed to survive, he has done what was necessary to have that water "excellent water - from a very deep natural well above which he had constructed a primitive winch" (6). The time spent by the narrator with the shepherd, slowing him in his journey, shows him all the time necessary to pick up acorns, "to inspect them", to "separat[e] the good from the bad" (10), to select "one hundred perfect acorns" (10) and then to plant them.

If the narrator insists so much on time, it is to let the reader be aware of what he has realised by comparing various times. Clock time makes him aware of the slowness of nature's time, which transforms the landscape and reveals the place, which had first appeared as the shadow of a place, without water, without trees, without people living in villages, and nearly without life, a ghost place. Yet the slow time of a man's gestures and all the patience necessary for the care given to the trees he planted year after year to reconstitute a landscape of life, changed the place of death and despair into a place of happiness and hope, which was there but unseen, like the water under the ground, just waiting for the moment when the connections would be reestablished thanks to one person.

5 The Philosophy of Numbers or the Poetic Mathematics of Planting

The insistence of the narrator on time indications is part of a whole system of numbers pervading the text. The text is filled with numbers, dates, years, and in such a symbolical story, it is not by chance. On the other hand, there is a whirl of numbers facing this unique acorn. We can count seventy numbers in a book composed of only eighteen pages of text. These numbers concern time, space, and trees. It is either time passing or dates: “about forty years ago” (3), “after three days” (4). We know the progression in time through the indications of years, from 1910 to 1947, with the two wars of 1914 (“the war of 1914, in which I was involved for the next five years”, 17), and 1939 (28), which constituted “the only danger to the work” as many oaks planted by the shepherd had been cut for cars that “run on gazogenes (wood-burning generators)”. But it was much too expensive and it was abandoned. In fact it is the wild landscape where no railroads had been built yet that saved the trees. The shepherd’s relationship with time is often linked with the adverb “peacefully”, recurring again and again throughout the story, opposing the quietness of the shepherd’s gesture to the conflictual agitation and violence of human history. These temporal numbers are linked with a system of opposition, once again contrasting the destructive power of historical time (“I had seen too many men die during those five years”, 17) and the constructive power of a gesture revealing the rapidity of transformation: “It has taken only the eight years since then for the whole countryside to glow with health and prosperity” (33). Throughout the story we can also follow the shepherd’s evolution in age, from “[f]ifty-five” (14) to “eighty-seven” (29), thus showing how love for a land conveyed through a repetitive gesture of planting trees can cover a whole life and change the repetition of a gesture into the wonder of constantly new landscapes and new moments. The relationship with time for the wise man facing nature reminds us of Masanobu Fukuoka’s poem closing his seminal book, *The One-Straw Revolution*:

As I walk alone in the garden I see a temporary hut
 A day is a hundred years
 Daikon and mustard are in full bloom
 Dimly the moon shines in the year two thousand
 (Fukuoka 2009, 184)

There is no punctuation mark in this final poem in which the philosopher and farmer, whose philosophy of farming involved him in many projects all over the world to fight against desertification, shows life as a continuum, time as a continuum, the journey here and beyond as a continuum. As in Giono’s tale, numbers and time are at the core of

this poetic will where the perception of each day as a hundred years totally changes life and allows us to enjoy the present moment and to consider our present as the future of others: “the moon shines in the year two thousand”. The conscience of natural time replaces the time of the clock. Numbers and time united appear as a philosophy of life revealing the sense of one’s belonging to a world that is one. The face to face with nature takes us far from the time of the clock, as Scott Slovic experienced it in the H.J. Andrews Experimental Forest in Oregon, where he spent a few days without any clock, just facing the forest: “what would it be like to step out of time for several days”, he writes, “and act as if there were simply day and night, rain and shine, no other minute parceling out of hours, minutes, and seconds?” (Slovic 2008, 207). His questioning leads him to feel the forest, to breathe in the forest, to be both in the present of his run and in the past of his childhood. Natural time leads him to feel his own life, past and present merging in his breathing in of the forest. Time does not disappear. It is just that organic time leads the runner, now an adult, to find the deepest part of himself in natural time. Minutes, hours, years are no longer separate. They are the forest. They are his childhood, in the moment he lives again by being impregnated with organic time. Like Elzéard Bouffier, the shepherd from Provence, the American runner and writer and the Japanese philosopher and farmer are alone: “I walk alone in the garden”, the philosopher writes. It is as if that loneliness, which does not mean solitude, was necessary to understand one’s own link with the land, one’s own link with oneself. This is what Chinese hermits did in the mountains of China.

The poetry of the one and the multiple is illustrated by the gesture of one shepherd planting thousands of trees. And another equation appears with thousands of trees constituting one forest. Niyi Osundare writes in the poem “Many Stars, One Sky”:

Many stars
One sky

A pageant of colors
One rainbow

Many trees
One forest

A medley of songs
One choir

[...]

A throng of people
 One world
 (Osundare 2021, 58)

The shepherd's gesture reminds us of this fundamental mathematics of the universe: "Many trees/One forest", "A throng of people/One world", as Niyi Osundare writes. The Nigerian poet reminds us that any whole is made of multiple parts, and each part is important just as every limb is necessary in one body. We are many but all in the same place, the earth, as the recent pandemic has reminded us. Giono's shepherd shows that one person can act for the community and recreate it. Space, like time, is concerned by that poetic mathematics of numbers.

In Giono's book, numbers linked with space concern either distance ("he climbed to the top of the ridge, about a hundred yards away", 13; "some twelve kilometers from his cottage", 23); or the quantification of houses, first in ruins and then restored: "five or six houses" (4), "five houses restored" (33). The numbers linked with houses reveal a human revival: "[n]ow there were twenty-eight inhabitants, four of them young married couples" (33).

Numbers are also linked with the shepherd's life as far as the living community surrounding him is concerned. It is first a non-human community, his dog, sheep and then bees: "[t]hirty sheep" (6), and later, "four sheep" (19), "a hundred beehives" (19); and then a human community, increasing as the number of trees increased. It grows from the only shepherd to the little group formed by the stranger and a friend of his, one of the forestry officers of the delegation who had "come from the Government to examine 'the natural forest'" (24) ("the three of us", 25), to a whole community meaning that life has come back to that place: "more than ten thousand people owe their happiness to Elzéard Bouffier" (34). These "more than ten thousand people" are contrasted numerically to "one man" (34). The use of numbers appears as a poetic way of expressing a philosophy revealing the weight of one person's gesture towards a land and a community.

And this is done thanks to the planting of trees. So it is not surprising that the greatest quantity of numbers should concern trees. This logically starts with number one since the acorns are planted "one by one" and then the technique is described in numbers: "he counted them out by tens", "when he had thus selected one hundred perfect acorns" (10), "[h]e planted his hundred acorns with the greatest care" (14). We can also observe that the tool used to plant the acorns, whose size is given, is "an iron rod about a yard and a half long" (13), which is used both as a walking stick and a planter. The fact that the stress is laid on this simple object reveals the importance of its double use: to plant acorns and to walk (13). Walking

forward and making holes to let trees grow are part of a same movement forward, and the tool with a double function is the symbolical sign of it. Both the walking movement and the gesture of the hand, digging a hole to fill an empty space with a promise of life, are important. A similar gesture is made by the little tramp at the end of Chaplin's film *A Dog's Life* (1918). Chaplin, for whom the hollow space is so often used, carefully digs holes in the soil to plant each seed, instead of broadcasting them as is usually done. Chaplin, whose solitary tramp has often been saved by holes in fences allowing an escape, chose the gesture of planting seeds as the image of happiness. The little tramp always fills this hollow world with the life that the society refuses to him. And the seeds planted and not sown, one by one, at the end of the film, are the sign of a happy ending, of happiness found as life is going to sprout out of the soil. Initially, the little tramp in the city is as solitary as the shepherd in the mountain. A dog will be his first companion, before a woman's love changes his life. For him it is the urban space that was marked by absence and emptiness, and it is through the gesture of planting seeds one by one that he reverses the process and changes the rejected homeless tramp into a farmer living in a house with his beloved and his dog and giving life to a piece of land. For Elzéard Bouffier, it is in the mountains made empty and barren because men cut all the trees that the shepherd reversed the process and made life come back, with the same gesture of planting a fruit into the soil to make a forest grow again and bring back happiness to the place.

Throughout the book, the narrator intersperses the story with information concerning the evolution in the number of trees: "He planted his hundred acorns with the greatest care" (14), "[f]or three years he had been planting trees in this wilderness" (14). And gradually there is a sort of overflowing of numbers; a series of short sentences suggest the relatively rapid increase of the forest:

He had planted one hundred thousand. Of the hundred thousand, twenty thousand had sprouted. Of the twenty thousand he still expected to lose about half, to rodents or to the unpredictable designs of Providence. (14)

And on the same page: "[t]here remained ten thousand oak trees to grow where nothing had grown before" (14), and then: "I told him that in thirty years his ten thousand oaks would be magnificent" (16), "[h]e answered quite simply that if God granted him life, in thirty years he would have planted so many more that these ten thousand would be like a drop of water in the ocean" (16). The gradual increase of the number of trees is such that the shepherd, who loves silence above all and said very few words, feels the need to explain things when it concerns the number of trees, as if to educate people to the

conscience of planting. He compares the ten thousand oaks growing at that moment, to a drop of water, and shows the importance of that drop of water, which, like the hummingbird's drops of water meant to put out a wildfire,⁵ will result in a forest composed of "three sections" and measuring "eleven kilometers in length and three kilometers at its greatest width" (21). As the story progresses, the counting of trees gives way to the measuring of a whole forest. Together with the oaks, the shepherd decided to plant beeches and one sentence is particularly poignant in its simplicity: the narrator says there were "handsome clumps of birch planted five years before – that is in 1915, when I had been fighting at Verdun" (21). Throughout the story, the numbers of human history and tragedies face the numbers of planted trees. The face to face is clear in this sentence in which the narrator is aware of the peaceful work of the shepherd: even at the moment when one of the most terrible battles in mankind's history was taking place, he was just planting trees. Exactly as when people cut trees to feed cars, he could not see that as he was far away. It is as if it were necessary for him to be away from human history made of destruction and murders at a huge scale, to just take his small iron rod and make holes to plant trees, to take care of the land, to recreate life in the wasteland.

6 Global Change in Local Gestures

The shepherd's gesture of planting acorns one after the other until the moment when a whole forest appears in the landscape is the illustration of what is often presented as a Native American legend, the story of the hummingbird's share of the work. French agro-ecologist Pierre Rabhi based his philosophy on the story. Here is the way he tells it:

One day there was a huge wildfire. All the animals, terrified and shocked, powerlessly observed the disaster. Only the small hummingbird was busy, flying to fetch a few drops in his beak to throw them on the fire. After a moment, the armadillo, irritated by that derisory agitation, said to him: "Hummingbird! Aren't you mad? It's not with those drops of water that you are going to put out the fire!" And the hummingbird answered: "I know it, but I'm doing my share of the work".⁶

⁵ About the hummingbird, see below.

⁶ <https://www.novethic.fr/actualite/environnement/agriculture/isr-rse/avec-la-mort-de-pierre-rabhi-son-reve-de-sobriete-heureuse-150369.html>.

Yet we must keep in mind that nothing is sure about that legend, which was taken up by lots of artists, in comics or tales.⁷ Maybe Pierre Rabhi does not give the original version (which is not really known) but the positive aspect of his book is that he spread the story in France. Even if lots of research has been done about it, no one really knows from which people the myth comes from. There may be correspondences between several stories and several peoples. In an article by Patrick Fishman, mentioned by Laurence De Cock and quoted by Le Quellec, Fishman writes that

the original legend shows a very determined hummingbird, who is angry, and is going to mobilize the pelicans, the only birds able to store enough water to put out the devastating fire: so it is not a drop-by-drop participation, individual and heroic, but the organization of a collective fight, not an appeal to wisdom and moderation but to radicality.⁸

Yet should wisdom and fight be opposed? Le Quellec mentions the source he found in the story told by a Haida artist, Michael Nicoll Yahgulanaas, a story itself inspired by the Quecha, as Michelle Benjamin says in her postface to the book, the preface being by Wangari Maathai. Le Quellec says that

All [he] could find is a book by Michael Nicoll Yahgulanaas, a Haida artist and environment fighter, born in 1954: *Flight of the Hummingbird*. This book was published several times. In 2020 Wangari Maathai wrote the preface [...]. Its subtitle, **A parable for the environment** shows that it is a militant's book, and not the publication of a traditional tale. At the end of the book, a postface by Michelle Benjamin reveals that this "story of a little bird, dedicated and determined to put out a wildfire, is based on a parable told by the Quechua in Ecuador". So it is a creation made by an artist who is very much concerned by the preservation of environment. (Le Quellec 2021; emphasis in the original)

In fact, Rabhi's interpretation of the story underlines the weight of the individual act whereas Yahgulanaas's story explains the need for collective action. Either being alone as in the French agro-ecologist's

⁷ For an interesting survey of the various occurrences of the hummingbird's story, see the article by Jean-Loïc Le Quellec, "Le vrai-faux mythe du colibri". <https://temp-sresents.com/2021/12/15/le-vrai-faux-mythe-du-colibri/>. I would like to thank the two reviewers for their interesting comments and suggestions, especially on the hummingbird's story.

⁸ Fishmann, P. (2018). "Et si le conte du colibri n'était pas gnanngnan?". *Reporterre*, 23 October. Quoted in Le Quellec 2021.

rewriting, or gathering many birds around him to show that nothing can be done without the union of living forces as in the Haida artist's rewriting of the Quechua legend, the hummingbird shows the weight of a gesture, be it individual or collective, or individual *and* collective. As every collective action must start with lots of individual decisions.

The symbolical gesture of the bird putting out a wildfire, alone or after mobilising more birds, comes to our minds when we read about a shepherd changing a sunburnt land deprived of the trees that once were there, by planting one acorn after the other. The drop of water in the hummingbird's beak or the acorn in the shepherd's hand tell the same story: a simple, apparently derisory gesture can make the whole difference. The smallest element brings life again to a vast land. Planting as an act of love and empathy for the community, a family, a village, a region, a country, the world: this is what Giono's shepherd does.

Giono's story located in a precise region of France, Provence, and in a precise village, Vergons, yet speaks to the whole world and about the whole world. What the simple story of a lonely shepherd living in a desolate landscape shows is that everything is possible with an individual's will and hand, a land, whatever its size, and a seed or a fruit. It shows that even a man who has lost everything, all the people he loved most, who lives in a place that seems totally hostile, even in the worst conditions, a man can change first his own life, then his local place, and then the life of a whole community and, when spreading the idea, he can change the world. The shepherd's action is not meant for himself, but for his land and because he knows that when the land becomes fertile again, life will change for everybody; he acts quietly, refusing all that breaks connections: possession, selfishness, and conflict. Exactly as he ignores the wars, he ignores possession. First he shares the few things that belong to him, "the water from his water-gourd" (6), his house, his meal (6). He also shares his skill by showing the stranger how to sort out good acorns from frail ones and then by showing him how to plant each acorn. And when the narrator questions him about who owns the land, his answers shows that possession is nothing if there is no care:

Did he know whose it was? He did not. He supposed it was community property, or perhaps belonged to people who cared nothing about it. He was not interested in finding out whose it was. He planted his hundred acorns with the greatest care. (13-14)

Everything starts from a man's awareness that "this land was dying for want of trees" (14). The shepherd's story develops from his first apparition to the last perception the narrator has of him:

But when I compute the unfailing greatness of spirit and the tenacity of benevolence that it must have taken to achieve this result,

I am taken with an immense respect for that old and unlearned peasant who was able to complete a work worthy of God. (35)

The story presents the shepherd as the embodiment of both the landscape into which he is totally integrated when he is mistaken for a tree, and of a God-like figure. This is reinforced by his name Elzéard Bouffier, composed of a first name meaning 'God's help' and a surname linked with the action of the wind, blowing. He is also said to be "one of God's athletes" (26). Moreover, the shepherd's simple gestures of collecting acorns, "separating the good from the bad" (10), may appear as a biblical echo to the New Testament (Mt 13:24-30), symbolically evoking the sorting out of wheat and chaff, which gave the French phrase *séparer le bon grain de l'ivraie*, which Giono, who uses several Christian references in his novella, seemed to have in mind. Planting acorns, watering them, taking care of the young trees, all these actions transform the landscape from the "desolation" of the beginning of the story into a "land of Canaan":

When I reflect that one man, armed only with his own physical and moral resources, was able to cause this land of Canaan to spring from the wasteland, I am convinced that in spite of everything, humanity is admirable. (35)

The metaphorical use of the "land of Canaan" sends us back to the Bible and the Promised Land and is part of the Christian expanded metaphor used by Giono. Canaan was the land promised to the Hebrews, a land for a migrating people who would find there all that was necessary for them to live. It has become here a metaphor of a heavenly land corresponding to some historical reality, revived in the shepherd's act of planting trees.

Connections are well shown by Wangari Maathai in her preface, taking up what she wrote in her autobiography, *Unbowed*, especially what her mother had taught her about the multiple roles of the fig-tree. It is interesting to note that Wangari Maathai also prefaced the 2020 edition of the *Flight of the Hummingbird* written by Haida artist Michael Nicoll Yahgulanaas. The shepherd's quiet individual gesture of planting trees and the hummingbird's mobilisation of a community to save the forest are connected through Wangari Maathai's writing: she suggests that everybody can act. Entitling her preface to *Flight of the Hummingbird* "Wisdom of the Hummingbird", she ends it with these words:

We sometimes underestimate what we can accomplish as individuals, but there is always something we can do. Like the little hummingbird in the story that follows, we must not allow ourselves to become overwhelmed, and we must not rest. This is what we are

called to do. Today and every day let us dedicate ourselves to making *mottainai*⁹ a reality. It is our human responsibility to appreciate nature and to preserve and protect the world's natural resources. We can all be like the hummingbird, doing the best we can.¹⁰

And in her preface to Giono's story, she shows the importance of connections and writes:

I first became aware of the importance of trees as a little girl, when my grandmother told me that I should not collect wood from the nearby fig tree because it was a gift from God. Even if I didn't know then why fig trees were special, I later understood that the fig-tree's deep roots tapped into underground streams and brought water to the surface, replenishing the land and bringing it life. Unfortunately, that indigenous wisdom, like the tree, did not survive the forces of colonialism and globalization. The pure stream where I used to play with frogspawn and tadpoles dried up, like the tree a victim of shortsighted forestry practices and the growing of cash crops.

I began to plant trees with the Green Belt Movement (GBM),¹¹ an organization I founded in 1977. Rural women had been telling me that they had to ask further and further to collect firewood for fuel. Their families were malnourished and their land was degraded. I saw that planting trees could provide these women with firewood, fruit, fodder for their livestock, and fencing for their land, and also stop soil erosion and keep streams flowing. Like the narrator of *The Man Who Planted Trees*, I saw human communities restored along with nature. (Maathai 2005, vii-viii)

Wangari Maathai shows the connection between her grandmother's wisdom and words, the fig tree and all its functions, and her fight to plant trees in Kenya. In her autobiography, here's the way she explained the connections between the fig tree and the underground water in a more scientific way:

I later learned that there was a connection between the fig tree's root system and the underground water reservoirs. The roots burrowed deep into the ground, breaking through the rocks beneath the surface soil and diving into the underground water table. The

⁹ She explains the word *mottainai*: "In Japan I learned the Buddhist word *mottainai*. It embraces the practice of not wasting resources and of using them with respect and gratitude" (Wangari 2008, <http://www.vidyaonline.net/dl/hummingbird.pdf>).

¹⁰ <http://www.vidyaonline.net/dl/hummingbird.pdf>.

¹¹ <http://www.greenbeltmovement.org>.

water travelled up along the root until it hit a depression or weak place in the ground, and gushed out as a spring. Indeed wherever these trees stood, there were likely to be streams. The reverence the community had for the fig tree helped preserve the stream and the tadpoles that so captivated me. The trees also held the soil together, reducing erosion and landslides. In such ways, without conscious or deliberate effort, these cultural or spiritual practices contributed to the conservation of biodiversity. (Maathai 2006, 46)

Her autobiography exemplifies environmental literature as defined by Scott Slovic speaking about

Three I's: 1. **Indigeneities:** Attunement to **local** cultural traditions, vocabularies, environmental conditions. 2. **Intersections:** Illuminating or pursuing **connections** of various kinds, sometimes healthy and sometimes destructive. 3. **Interventions: Acting** upon issues of particular salience or urgency to specific regions. (Slovic 2010; emphasis in the original)

Listening to local cultural traditions, Maathai points out connections which she converts into action.

The metaphor of the African stool, which she uses in her preface as in her autobiography, explains the link “between good management of the environment, democratic space and peace”:

In my effort to describe the linkage between good management of the environment, democratic space and peace, I have adopted a metaphor of the three-legged African stool. The three legs represent basic pillars for stable nations without which sustainable development is unattainable. By linking environment, democracy, and peace, the Norwegian Nobel Committee expanded the concept of peace and security, and validated my long-held belief that only through an equitable distribution of those resources and their sustainable use will we be able to keep the peace. I feel that, in this quiet way, Elzéard Bouffier understands that, too. (Maathai 2005, viii)

The African stool is the sign of her taking root in the African soil. It also suggests that any political idea must be anchored in the soil, solidly placed and as stable as the stool with its three legs. And she reminds that Giono's character “understands that, too”. Maybe if he ignores the two world wars in the story, it is perhaps a way to oppose the space of peace created by a good management of the land, and the space of conflicts created by a will of possession, greed, and a will of power, notions ignored by Elzéard Bouffier who just plants trees and thus reconstitutes a space of life and peace where everybody can live peacefully together.

Wangari Maathai's text is not only the story of a life but it is also an invitation to go on fighting. It gives reality to other literary texts warning us against deforestation. Her autobiography ends with an injunction to fight, which is also a cry of hope:

Those of us who witness the degraded state of the environment and the suffering that comes with it cannot afford to be complacent. We continue to be restless. If we really carry the burden, we are driven to action. We cannot tire or give up. We owe it to the present and future generations of all species to rise up and walk! (Maathai 2006, 295)

This is what Giono's shepherd does, he "rises up and walks". His simple gesture in his face to face with the land, a face to face between a lonely man and a wasteland at the beginning of the story, is both a healing gesture to himself, to the land and a gift to future generations.

7 A Healing Gesture

Giono's shepherd's gesture of planting trees, one after the other, until a whole forest should be reconstituted, until water flows again, until life comes back in villages, shows the deep role of the individual gesture for the community, either local or global.

But before that, it is also a healing gesture in his own personal life. Elzéard Bouffier has lost his son and his wife, and instead of letting himself be overcome with grief, he chose to restore the landscape where he lives. His personal life has been devastated by the death of the people he loved most. He decides to devote his life to bringing life again to the place, to the area and to a wider and wider area. The narrator evokes the two world wars that devastated the country and that caused so many deaths, he himself having seen so many of his comrades die beside him, having faced the horrors of war. Meanwhile the shepherd went on bringing life to the land, through his gesture of planting trees and taking care of them.

Planting as a healing gesture goes even further when we think about recent research concerning a virus that killed horses and humans in Australia in the '90s, showing the role of trees. After twenty years' research, a scientist realised that the problem came from the fact that there was no longer any tree blooming in winter, which would have given bats a habitat and preserved the horses grazing in summer under a tree where the bats lived. The researcher explained that the solution to prevent the virus from appearing again was to plant trees blooming in winter, thus offering the bats a habitat. The scientists explain the "inter-related linkages between land use and wildlife disease dynamics":

In general terms, three potentially inter-related linkages between land use and wildlife disease dynamics are clear: (1) ecological patterns across the landscape determine the distribution and abundance of biota, including pathogens and their hosts; (2) environmental stress affects wildlife susceptibility to pathogen *infection*, as well as the likelihood of wildlife *shedding* pathogens in a manner that increases exposure of other animals (including humans); and (3) human-altered landscapes bring wildlife into closer proximity to domestic animals and humans, thus increasing the likelihood that shed pathogens will *spill over* into populations of other species (ultimately, humans) where they may *spread* further. (Reaser et al. 2022; emphasis in the original)

Virologist Raina Plowright said that many studies have made the link between deforestation and the transmission of viruses. The researcher said that there were only five trees producing flowers in winter, trees that have almost completely disappeared from the landscape. So now, she said, the aim is to plant these trees again, on a surface big enough and with a sufficient diversity for the bats to find food in winter. And they think that this will allow them to avoid epidemics. Twenty-four years were necessary for researchers to understand the system and conclude that natural habitat was at the core of the problem. Planting trees again is the solution. The conclusion of the documentary is that

once we have learnt to understand the signals sent by nature, then only will we be able to sleep quietly. Without thinking about those viruses surrounding us and having done of us what we are.¹²

In this article Raina Plowright and other researchers demonstrate that

landscape immunity is defined as the ecological conditions that, in combination, maintain and strengthen the immune function of wild species within a particular ecosystem and prevent elevated pathogen prevalence and pathogen shedding into the environment. (Reaser et al. 2022, 4-5)

Giono's shepherd meets scientists' discoveries about the necessity of reconstituting the habitat of wild species to preserve human life; he did what his ancestors had done, and with a simple gesture of

¹² *La loi de la jungle*, written and directed by Florent Muller. Images by Frédéric Capron, Romain Potocki. Production manager, Sophie Knoll. France.tv studio/France Télévisions, 2022.

common sense, he just tried to restore the landscape and the habitat that had disappeared. The human microcosm appearing in the area initially depicts human flaws, with aggressiveness and violence that seems generated by the hostile land. The human world lives a hard life in an “excessively harsh” climate (9), which shows the link between the climate and human predicament. The hostile, dry landscape with a ferocious wind blowing on it seems to be reflected in the human life. The lexical field of hostility highlights that harshness: “unceasing conflict of personality”, “perpetual grinds”, “grievings”, “rivalry in everything”, “ceaseless combat between virtue and vice” (9), with the climax of the description in “epidemics of suicides and frequent cases of insanity, usually homicidal” (10). The bond between that dark life and nature appears through the reference to the wind: “[a]nd over all there was the wind, also ceaseless, to rasp upon, the nerves” (10). Placed between the war opposing vice and virtue and the “epidemics of suicide”, the wind appears as a powerful force generating everything. But the shepherd’s life shows an alternative. This dark depiction of human life in that barren region will be reversed after the shepherd’s quiet and patient action. Even if he could have been desperate because of so many trials, he chose to act, in the most simple way, by planting acorns and taking care of the young trees. And on the same page, the narrator gives a vision opposed to that world dominated by conflicts and violence: “[t]here was peace in being with this man” (10). The first vision of the human world in a hostile barren landscape will be replaced in the end by a very different human world. Instead of despair and death, hope and life pervade the landscape: “hope then had returned” (30). The ferocious wind has become “a gentle breeze” (30), and this breeze has the sound of water, which becomes real water since “a fountain had been built [...] it flowed freely”. Thanks to the alliteration in [f], the text echoes the murmur of the water that has come back. The emphasis is on change: “[e]verything was changed” (30). Just a few acorns and the gesture of an isolated man have changed desolation into life, conflict into peace, drought and ferocity into the softness of the breeze in the forest and on the water. The plantation of one tree appears as the climax of emotion. After seeing the shepherd planting acorns, and later seeing the results in the forest that had grown, the narrator says:

I saw that a fountain had been built, that it flowed freely and - what touched me most - that someone had planted a linden beside it, a linden that must have been four years old, already in full leaf, the incontestable symbol of resurrection. (30)

He had seen the shepherd plant thousands of trees and yet what touches him most is the fact that another person should have plant-

ed one tree. Because this is the sign that the shepherd's action will be continued, that, by planting trees and reconstituting a forest, he has spread the conscience of the gesture, of the many ways in which planting a tree can matter. He uses the strong religious word of "resurrection" and that symbol of resurrection is reinforced by the reference to Lazarus several pages further: "Lazarus was out of the tomb" (33). The clear spiritual semantic field leads the walker from desolation to resurrection and to a "land of Canaan" in which a solitary shepherd who had lost everything, simply decided to make life reappear, slowly, gradually, step by step. His unselfish gesture made in the present of his solitary life was meant for the future of the generations that would come back when the small acorns had become a forest, thus allowing the resurgence of water, bringing about the fertility of gardens and family life and changing the climate. The warm climate due to the absence of forests that had destroyed all life became a soft climate because of the forests, the return of water, evaporation, clouds and rain, thus of fertility and life.

The shepherd's gesture was the result of both his knowledge of nature, his visionary perception and his unselfish gesture changing what should have been personal despair into the revival of a whole land and a whole community and a lesson to the world. Planting acorns and taking care of the young trees healed him as when he lived a personal tragedy, instead of shutting himself in his sorrow, he saw a mission that he perceived in the tragedies brought about by a world where all biodiversity had been destroyed, thus causing climate change, thus bringing about human diseases and death. In that desperate world he saw that the reverse was possible. With one gesture, quietly reproduced thousands of times, he reintroduced biodiversity, and subsequently the climate changed to bring about rain and a soft breeze generating peace and happiness in numerous families. One man, with his one repeated gesture, has brought a whole community back together again.

8 Conclusion: From Literature to Action

The shepherd's work in what is both presented as a true story and has all the appearance of a fable constantly mingles reality and imagination. The toponym corresponds to a French village and the region corresponds to an existing area. Historical facts are real. The narrator has lived the same trauma as the author. But the main character, who was supposed to be a true person, is invented. The final metaphor of the land of Canaan belongs to the field of poetic creation and to a biblical myth at the same time. But it was also a geographical region that existed. Moreover, the very name has given birth to an organisation in Africa, i.e. Canaan Land, which is a social organ-

isation in Ivory Coast, using an inclusive model of seasoned agriculture. The aim is to feed the population of Ivory Coast by developing a model of inclusive and sustainable agriculture, helping small peasant women while respecting the environment.¹³

Giono's tale and its fame are the material illustration of the fact that literature either can have a deep influence or can foreshadow action. This tale apparently just telling a story is in fact a beautiful example of literary activism and the parallel existing between the imaginary shepherd's action in a small part of Provence and Wangari Maathai and the Green Belt movement in Kenya shows two forms of activism. In the 2005 anniversary edition indeed, Giono's tale is framed by texts of people having founded organisations: a preface by Wangari Maathai, the founder of the Green Belt Movement and Nobel Prize for Peace in 2004, and an afterword by Andy Lipkis, the founder of TreePeople.¹⁴ Moreover, at the end of the book, there is a list of US-based organisations helping reforestation and allowing people to plant trees, for example *Trees for Life*, thanks to which people can plant fruit trees in developing countries. The tale is clearly presented as belonging to activism and it has been adopted by some creators of organisations, thus showing that the literary work and real planting through organisations are not separated but complementary.

Vanessa Kohner, in her PHD thesis, *Récits et écologies: pratique de l'attention polyphonique*, analysing Jean Giono's tale, speaks about "vegetal activism". Studying the novella from a philosophical point of view, (analysing especially the fact that it is presented as a real fact but is fiction, as Giono said later), she says that "this tale questions the statute of fiction, the role of the efficient, even pragmatic lie" (Kohner 2018, 92). She adds that

to urge people to practice a tree policy, Giono offers a narrative that is completely fabricated and he creates a character about whom he cultivates some hesitation about whether he could exist on a mode making him appear in a civil register. (98)

Her philosophical analysis leads her to claim that "[t]he creation of truth in *L'homme qui plantait des arbres* calls the reader to create a real meeting a future that should not be apocalyptic" (98). And she alludes to Frédéric Back, who made the film from Giono's tale and who had already planted 3,000 trees "when he met Jean Giono's tale". Vanessa Kohner analyses the theme of loss in Giono's tale, and this appears as a way of leading us "to think with the experience of loss": "[w]ith the current ecological mutations", she writes, "it seems that

¹³ <https://canaanland.africa>.

¹⁴ <https://www.treepeople.org>.

we have to learn how to live in a world changing very quickly, and to learn to think with the experience of loss" (100). The shepherd's loss of his wife and his son is changed into a will to bring life to the land and to other people, into an attention to the world. "To see the breath of beloved people leave the flesh body and mingle with the rest of the universe can activate some attention to essential things" (104). Vanessa Kohner's brilliant philosophical analysis of Giono's tale shows its political dimension:

In Giono's tale, the fact of *hoping* is some activist optimism, a militant positivity, giving a meaning, making things move and making the senses dance in the present. Creating small breaths that would activate the living in us and around, is necessary to act collectively to build a world that should not dig its own grave. [...] Hope helps us to visualise a sense/a direction. (124)

Vanessa Kohner's philosophical approach of Giono's tale underlines the link between every individual's personal life and his/her possible action to change things in the world and give the world hope. Activism in words to lead people to activism in facts.

Giono's tale has sowed many seeds throughout the world, making things change. In 2016, the British scientist, environmentalist and sylvologist Gabriel Hemery wrote a sequel to Giono's tale, entitled "The Man Who Harvested Trees and Gifted Life". Gabriel Hemery is also the co-founder, with Sir Martin Wood, of the Sylva Foundation.¹⁵ Jim Robins published a book inspired from Giono's tale in 2012: *The Man Who Planted Trees: Lost Groves, Champion Trees, and an Urgent Plan to Save the Planet*. It tells the true story of David Milarch, the co-founder of Archangel Ancient Tree Archive, who clones the biggest trees on the planet to save forests and ecosystems.¹⁶ Late Terry Mock, a member of the team, the creator of Tree of Life Sustainable Development Consulting and the co-founder of Sustainable Land Development Initiative, has developed a project of research, education and leisure in the field of eco-forestry and permaculture in the greatest ancient forest of the south coast of Oregon (see Learn 2012). The notion of tree archive is a different conception of planting since the aim is not simply to plant trees but to save ancient species of trees that are threatened. In France an organisation like Reforestaction¹⁷ acts for reforestation locally and globally. And after the "Call for Living Forests" (Appel pour des forêts vivantes), a movement was born to act against the industrialisation of forests (d'Allens 2021). In Feb-

¹⁵ <https://www.sylva.org.uk>.

¹⁶ "Ancient Trees for the Future" (<https://www.youtube.com/watch?v=y069UFbk11s>).

¹⁷ <https://www.reforestaction.com>.

bruary 2022, children planted three hundred trees with the organisation Des enfants et des Arbres (Cattiaux 2022).

Jean Giono's tale, initially rejected because there was no proof that the shepherd was a true person, has lots of echoes in reality: Wangari Maathai's Green Belt Movement, Andy Lipkis's TreePeople, and even the research engine ECOSIA, all work to involve people to plant trees and to make them aware of the connection existing between trees, the whole environment and human life.¹⁸

All those initiatives, books, organisations, show the link between the local and the global. "The locality is the only universal", as the poet William Carlos Williams wrote after John Dewey.¹⁹ This is what Giono's tale suggests. That book spreads the simple idea that every person can act to change the world in every place, even the most hostile one and even if that person has lived the most tragic experiences. Its genre is uncertain, as it is considered as either a short story, a tale, a fable or a children's book; but there is one certainty: its spreading of words works like the shepherd's gesture spreading oaks and changing a desert into a beautiful fertile land. In *Lanceur de graines*, Giono wrote: "Do you fear words? It's with them that you make the truth" (Giono 1995, 115). Giono spread words into reality as Elzéard Bouffier spread life in an imaginary world being a mirror placed before our real world. A regional story, deeply rooted in the soil of Provence, has become the fertiliser of millions of trees planted throughout the world. It has become the fertiliser of consciences, changing "unparalleled desolation" (4) into "Canop[ies] of Hope".²⁰

¹⁸ <https://www.ecosia.org>. ECOSIA is a German research engine created in 2009. It has the same function as Google, except that 80% of its benefits are given to organisations working for reforestation. Each research made by an individual is part of a programme of reforestation. After forty-five researches by one person, a tree is planted. The virtual dimension of a research engine is reversed to make the virtual action a concrete act, a return to the soil. The equation 'clicking on ECOSIA is planting a tree' reinvents virtual life. Through videos, the research engine teaches people the importance of forests and the damage they undergo. If most people in the world used ECOSIA instead of Google, or simply shared their researches, using partly Google and partly ECOSIA, this would make a difference both concerning reforestation and concerning the awareness of the role each individual can have. Some examples of their videos: "The search engine that plants trees" (https://www.youtube.com/channel/UC1_up347GdfKBD-VGqwjt7Aw); "Plant Trees Online" (<https://www.youtube.com/watch?v=yRDA1ynrHTU>).

¹⁹ "Already in 1920, as John Beck has pointed out, Williams was impressed by an article John Dewey wrote for *The Dial* that argued that 'the locality is the only universal' (Dewey 697); he used that phrase in a manifesto in the second issue of *Contact*, a little magazine he edited" (Rigaud 2016).

²⁰ "Canopy of Hope" is the title of the epilogue of Wangari Maathai's autobiography, *Unbowed: A Memoir*.

Bibliography

- D'Allens, G. (2021). "Partout en France, des citoyens se liguent pour que vivent les forêts". *Reporterre*, October 16. <https://reporterre.net/Partout-en-France-des-citoyens-se-liguent-pour-que-vivent-les-forets>.
- Besson, F. (2015). "From Deforestation to Awareness: Literature opening on to a 'Canopy of Hope'", in Palusci, O.; Ventura, H. (eds), "Wastelands: Ecnarratives in Contemporary Cultures in English", monogr. no., *Anglistica*, 19(2), 163-78.
- Besson, F. [2019] (2020). *Ecology and Literatures in English. Writing to Save the Planet*. Newcastle Upon Tyne: Cambridge Scholars Publishing.
- Cattiaux, O. (2022). "Des écoliers plantent 300 arbres avec l'association Des Enfants et des Arbres". France Bleu Champagne-Ardenne, February 23. <https://bit.ly/3UkI96c>.
- Chabot, J. (1982). *Giono, lecture plurielle*. Laval: Presses Universitaires de Laval.
- Chabot, J. (1990). *L'Imaginaire*. Arles: Actes Sud.
- Chabot, J. [1987] (1992). *Symptôme et symbole chez Giono*. Aix-en-Provence: Publications de l'Université de Provence.
- Chabot, J. (2002). *La Vie rêvée de Jean Giono*. Paris: L'Harmattan. L'Art en bref.
- Durand, J.-F. (2000). *Les Métamorphoses de l'artiste: L'esthétique de Jean Giono: De "Naissance de l'Odyssee" à "L'Iris de Suse"*. Preface by J. Chabot, Aix-en-Provence: Publications de l'Université de Provence.
- Fishmann, P. (2018). "Et si le conte du colibri n'était pas gnan-gnan?". *Reporterre*, 23 October. <https://reporterre.net/Et-si-le-conte-du-colibrin-etait-pas-gnan-gnan>.
- Fukuoka, M. [1978] (2009). *The One-Straw Revolution. An Introduction to Natural Farming*. New York: New York Review Books.
- Giono, J. [1985] (2005). *The Man Who Planted Trees*. White River Junction (Vermont): Chelsea Green Publishing Company.
- Giono, J. [1953] (2002). *L'Homme qui plantait des arbres*. Paris: Gallimard Jeunesse.
- Giono, J. [1943] (1995). "Lanceur de graines". *"La femme du boulanger" suivie de "Le bout de la route" et de "Lanceurs de graines"*. Paris: Gallimard.
- Giono, J. (1943). *L'eau vive*. Paris: Gallimard.
- Goodrich, N.L. (2015). *Giono. Master of Fictional Modes*. Princeton: Princeton University Press.
- Goodrich, N.L. [1985] (2005). "Afterword to the Original Edition". *The Man Who Planted Trees*. White River Junction (USA): Chelsea Green Publishing Company, 37-44.
- Gutman, E. (2019). "Ecosia, le moteur de recherche citoyen qui plante des arbres". *Telerama*, March 28. <https://www.telerama.fr/medias/ecosia,-le-moteur-de-recherche-citoyen-qui-plant-des-arbres,n6181105.php>.
- Hemery, G. (2016). *The Man Who Harvested Trees and Gifted Life*. <https://gabrielhemery.com/books/>
- Kohner, V. (2018). *Récits et écologies: pratique de l'attention polyphonique*. Université Libre de Bruxelles: Faculté de Philosophie et Sciences Sociales.
- Learn, S. (2012). "Ancient Redwoods, Giant Sequoias to be 'Archived' on Oregon Coast". *The Oregonian*, November 26. https://www.oregonlive.com/environment/2012/11/clones_of_ancient_redwoods_gia.html.

- Lipkis, A. [1985] (2005). "Afterword to the Twentieth Anniversary Edition". *The Man Who Planted Trees*. White River Junction (USA): Chelsea Green Publishing Company, 45-53.
- Maathai, W. (2006). *Unbowed: A Memoir*. New York: Knopf.
- Maathai, W. (2008). "Foreword to the Twentieth Anniversary Edition". Yahgulanaas, M.N. (ed.), *Flight of the Hummingbird: A Parable for the Environment*. Vancouver: Greystone Books, vii-ix.
- Maathai, W. [1985] (2005). "Foreword". *The Man Who Planted Trees*. White River Junction (USA): Chelsea Green Publishing Company, vii-ix.
- Maathai, W. (2002). *The Canopy of Hope: My Life Campaigning for Africa, Women, and the Environment*. New York: Lantern books.
- Martin, G.; Yanez-Arenas, C.; Chen, C.; Plowright, R.K.; Webb, R.; Lee, J.; Skerratt, F. (2018). "Climate Change Could Increase the Geographic Extent of Hendra Virus Spillover Risk". *Ecohealth*, September, 15(3), 509-25. <https://doi.org/10.1007/s10393-018-1322-9>.
- Nègre, E. (1996). *Toponymie générale de la France. Étymologie de 35 000 noms de lieux*. Vol. 2, *Formations non-romanes; formations dialectales*. Genève: Librairie Droz. Publications romanes et françaises 194.
- Osondare, N. (2021). *Green: Sighs of Our Ailing Planet*. Boston: Black Widow Press.
- Poindexter, O. "Want to Plant More Trees? Just Use a Different Search Engine". *Wired*. <https://bit.ly/3GVW1Rf>.
- Rabhi, P. (2018). *La part du colibri*. La Tour-d'Aigues: Editions de l'Aube.
- Reaser, J.K.; Hunt, B.E.; Ruiz-Aravena, M.; Tabor, G.M.; Paz, J.A.; Becker, D.J.; Locke, H.; Hudson, P.J.; Plowright, R.K. (2022). "Fostering Landscape Immunity to Protect Human Health: A Science-Based Rationale for Shifting Conservation Policy Paradigms". *Conservation Letters. A Journal of the Society for Conservation Biology*, 20 January. <https://doi.org/10.1111/conl.12869>.
- Rigaud, A. (2016). "A Phosphorous History: William Carlos Williams' *In the American Grain*". *European journal of American Studies*, 11(1). <https://doi.org/10.4000/ejas.11505>.
- Robins, J. (2012). *The Man Who Planted Trees: Lost Groves, Champion Trees, and an Urgent Plan to Save the Planet*. Spiegel & Grau Random House Group.
- Slovic, S. (2008). "Out of Time". *Going Away to Think*. Reno; Las Vegas: University of Nevada Press, 189-211.
- Slovic, S. (2010). "Green Trends in International Literary Studies: Many Voices, Similar Songs". 15 October. <http://astra.us/2010/Slovic--am--InternationalTrends.ASTRA.pdf> (2015-12-17).
- Soyinka, W. (2014). "Parables from Wangari Maathai's Trees". Presented at the Storymoja Literary Festival in Nairobi, Kenya. September. <http://www.africanstudies.org/blog/121-october-2014/418-parables-from-wangari-maathai-s-trees-by-wole-soyinka> (2015-12-14).
- Tual, M. (2020). "Ecosia : peut-on vraiment planter des arbres en utilisant un moteur de recherche ?". *Le Monde*, janvier 19. <https://bit.ly/3H16qew>.
- Williams, W.C. (2016). "In the American Grain". *European Journal of American Studies*, 11(1). <https://doi.org/10.4000/ejas.11505>.
- Yahgulanaas, M.N. (2008). *Flight of the Hummingbird: A Parable for the Environment*. Vancouver: Greystone Books.