Restoring Touch in Ecofeminist Speculative Fiction

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Posthumanist thought has long theorized sight, with its implied distance, unsystematic reciprocity and fantasy of mastery as the anthropocentric sense *par excellence* (Wolfe, 162-163). Among the senses, touch appears as a more challenging but richer way of reaching a knowledge of others that would be as immediate as possible. Of course, it must not be invasive. In the field of healthcare, ecofeminists Anna Berrard and Anaïs Choulet-Vallet distinguish between an intrusive and de-humanizing touch and a grounded and caring contact. Ecofeminist speculative fiction takes up this challenge and restores touch as a central sense in an attentive and inclusive epistemology. The genre's departure from realism allows authors to widen the scope of touch, literalizing its healing and visionary powers. Focusing on two ecofeminist speculative fictions, The Fifth Sacred Thing by Starhawk and The Stone Gods by Jeanette Winterson, this article intends to map out the ways touch is restored as a reliable yet complex epistemological path to an understanding of the world. As in any well-rounded mode of relating to the world, oxymora emerge. While touch is a sense that boasts immediacy between the touching subject and the touched object, The Fifth Sacred Thing portrays it as a mode of knowing that requires effort and proceeds gradually, following its own geography and literalizing the spacing at its heart theorized by Jacques Derrida and Jean-Luc Nancy. While it produces instantaneous effects, it also induces stases which allow both texts to spatialize the experience of touch as the exploration of a landscape and to represent the touched thing as a pattern, which provides a literary instantiation to the neuroscientific hypothesis of a tactile field.¹ The mutual permeation of bodies in which touch often results in the two novels also sets touch as an exemplary sense to "meet the universe halfway".

Landscaping deconstructed touch (Derrida, Nancy)

 The Fifth Sacred Thing features two opposite Californian nations in a post-apocalyptic future. The South is controlled by the Stewardship, an ecocidal, genocidal fascist state while the North has become an ecofeminist utopia where the most advanced science meets Eastern philosophies and
P. Haggard and G. Giovagnoli, "Is There a Tactile Field?", 65.

magic to heal people. The most important type of touch in *The Fifth Sacred Thing* by Starhawk is called *grounding*. It is practiced by everyone in the North but is particularly developed in healers. Madrone, a great healer from the North who has come to the South in a bid to support rebel groups attempts to teach it to a Southern audience that has never been attuned with its habitat. She explains: "we call it grounding, touching the four within us and around us". The four sacred things are earth, air, fire and water. This touching is not merely metaphorical, as it requires literally touching the ground, and paying attention to bodily sensations such as the air flow in one's lungs. Stuck in one of the working camps of the Stewardship, another character from the North, Bird, awakens from a chemically-induced, trance-like, dreamless state and is assisted by a fellow worker, Littlejohn, in his attempt at *grounding*:

Bird was trying to ground himself, trying to make contact with the earth, but she seemed miles away, imprisoned under concrete and steel. He bit his own lip hard, trying to breathe, trying to remember an image or a word that could anchor him. "Grab my hands", he whispered.

Littlejohn obeyed. The pressure on his hands was solid, was real. He could feel his hands and know they were his own and, from that knowledge, follow a trail of sensation slowly up through his body. His own body. His own dull pain of old injuries, which was different, he now knew, from the pain he heard inside him rather than felt. Someone was in pain. Someone was calling for help. "Thanks". Bird withdrew his hands. "Somebody's hurt. But it's not me".²

Since he cannot touch the ground, Bird must rely on *being touched* by Littlejohn. He needs the touch of Littlejohn's hand for his own proprioceptive sense of self to become an epistemological tool. That touch appears to have an immediate effect and therefore answer a criterion of immediacy, which is opposed to the obstruction endured by Bird and the earth, kept apart by "concrete and steel". The proprioceptive awareness acquired through Littlejohn's touch yields yet another level of knowledge: the knowledge of "someone else"'s pain, which turns out to be the pain of a new inmate coming back from the beating room. This journey towards another being's bodily state is equated to "a trail of sensation" which Bird follows "slowly up through his body". The singular used for "sensation" raises questions. If the plural had been used instead, "a trail of sensations" would amount to visualizing "sensations" (mostly linked to the sense of touch) as discrete entities, like so many stones marking the way. In the singular, the body and the sense of touch it experiences remain one even though Bird's self is constituted as an outside for himself, since he is able to follow a trail through it as if he were coming across a landscape. With "sensation" in the singular, the tension between discreteness and unity is at its highest. One of the points of this article is to argue that the

2 Starhawk, The Fifth Sacred Thing, 23.

speculative nature of the fiction at stake here facilitates the literalization of the tension between mediacy and immediacy inevitably rising from any conceptual approach of touch, whether phenomenological or deconstructionist. Deconstructionists such as Jean-Luc Nancy and Jacques Derrida³ argued repeatedly that the phenomenological view of touch which construes it as the sense of immediacy *par excellence* misses a whole part of its principle. Nancy thus analyzes self-touching:

And I touch myself from outside, I don't touch myself from inside. There are some celebrated analyses by Husserl and Merleau-Ponty on this question of "self-touching", of my own hands' "self-touching". But curiously-and this comes up over and over again in the whole tradition-everything always returns in interiority. The phenomenological analyses of "self-touching" always return to a primary interiority. Which is impossible. To begin with, I have to be in exteriority in order to touch myself. And what I touch remains on the outside. I am exposed to myself touching myself. And therefore — but this is the difficult point — the body is always outside, on the outside. It is from the outside. The body is always outside the intimacy of the body itself.⁴

Bird takes this necessity of an *outside* one step further, since he needs Littlejohn's hands to touch his own in order to start feeling his own body. That first instance is both highly mediated (through the hands of Littlejohn) and immediate in terms of temporality. Once "Littlejohn obeyed", Bird acknowledges, in a second short sentence that differs from the general flow of the passage, that "the pressure on his hands was solid, was real". On this first tension, a second one is built. Then, indeed, comes what I would like to call the geographical differentiation of touch, of which there are many instances in the novel: the journey through touch, across the body as landscape. This journey takes time: it is yet another form of mediation. In this particular instance, yet another level of sameness / differentiation appears as he acknowledges someone else's bodily sensation: "His own body. His own dull pain of old injuries, which was different, he now knew, from the pain he heard inside him rather than felt. Someone was in pain". Many layers of sameness and differentiation pile up in those sentences. First, his body is equated, in the first two nominal sentences, with pain, that is to say what this body feels. Yet the pain is dull and the injuries are old: temporal mediacy is reasserted. Further, interindividual mediacy is acknowledged as the other type of pain, which is different from his own, is technically not his own but that of someone else in the room. This stands as one more literalization of the *outside* Nancy says is at the heart of touch. Pain, a bodily sensation which should normally pertain to touch, is perceived here as a *sound*, so that not only are someone else's

³ In its attempt at undermining the foundations of an established order, and in spite of its predominantly white, male origin, deconstruction has long been acknowledged by many as a necessary step in postcolonial as well as gender studies.

⁴ J.-L. Nancy, Corpus, 128-129.

Le Toucher

sensations following a parallel trail inside his body in an interoceptive process, but the sense required to perceive them morphs from touch to hearing. This switch also echoes Nancy's description of intimacy with one's own body: "The only veritable intimacy of the body is in silence. This is Bichat's definition of health: health is life in the silence of the organs, when I don't sense my stomach, my heart, or my viscera".⁵ Here intimacy is doubly written off, as there *is* sound (pain) and the body in pain is not Bird's body; and yet, all of this is felt within his own body. The pain felt is no longer his and no longer touched and yet connections beyond the interpersonal boundaries of skin have emerged.

^{4.} Thus, Bird's "trail of sensation" literalizes the spacing present in Nancy's idea that one only ever touches oneself or the other from the outside: the outside of one's body touching someone else's outside body or one's own.⁶ This idea is taken up and furthered by Derrida, who mentions the spatial aspect of this interval at the heart of touch, as paradoxically, an absence of touch:

This *différance* of the between, this elementary *différance* of inter-position or intervals between two surfaces is at the same time the condition of contact and the originarily spaced opening that calls for technical prosthetics and makes it possible, [...] It is not even a moment; it is an anesthetic instance, an unpertaining that maintains its hold on aesthesic appertaining or participation, and pertains to it-that is to say insensibility in, and as, sensibility; anesthetics as the very ecstasy at the heart of pleasure.⁷

This "anesthetic interruption into the heart of aesthesic phenomenality"⁸ finds an unusually literal expression in the path taken by Bird. Pain is at the heart of his bodily experience of touch in the passage quoted above, and yet that experience involves a double negation of pain, or proper anesthesia: Bird's own pains are old and dull, held at temporal distance from the present, while the other pain is not his own, so that an interpersonal distance imposes itself just as it makes the two bodies closer. None of the pains are properly felt by Bird, and yet it is his feeling pain that constitutes the gist of the experience, and the motor of the action, as he will then walk to the man in pain, relieve him and make him a friend and an ally. Besides, the figure of the trace/trail works very well as "a mark of the absence of a presence, an always-already absent present"⁹: thanks to the speculative nature of her narrative Starhawk thus manages, in her approach to touch, to ride the

8 Ibid., 229.

⁵ Ibid., 129.

⁶ S. Jackson, Tactile Poetics, 6.

⁷ J. Derrida, On Touching, 229-230.

⁹ G. Spivak, xvii.

cusp between a form of deconstructionist abstraction and the embodiment and immediacy demanded by her ecofeminist ethos.

5. The Fifth Sacred Thing features many travels inside the body, most of the times initiated by a laying on of hands. This can be identified as the geographical differentiation of touch, as those occurrences are playing on the *spacing* inherent to touch in deconstruction and preventing its epistemological immediacy. In the following passage, Madrone attempts to trace the workings of an addictive immuno-booster in the body of a "she-pirate" named Isis, in the hope to undo the dependency:

"Just relax. Breathe deep". Madrone sat next to Isis and laid a hand on her thigh, feeling the firm muscle underneath, and desire like an electric skin. And something more, a sense of the body as a fantastic pet to be cared for and tended and groomed. Great power and great pain.

"Deeper. Breathe a little deeper. And relax". Madrone let her own senses sink deeper, down to where she could feel the balance, the chemistry, the hormones that flowed from glands and swam in the blood. She sensed strange things, the drugs maybe, associations she had never encountered before, as if parts of the woman's biochemistry were heated up, moving at a faster rate than all the rest — and, perhaps, aging just as fast. Burning, burning up, burning out.

Madrone's hands traveled to the pirate's throat and the center of her forehead. An image came, a river in an artificial channel, so wide and deep that without the rushing force of the waters the bed would collapse. Could she change the riverbed? No, but an adjustment to the glands, the pituitary, the ovaries, and, yes, flow could be sustained without the drugs, not at quite the same level, perhaps, but enough to prevent collapse of the system. Probably.

[...]

It had been a long time since she'd worked, Madrone realized, as she moved from sensing to sending power. Like pouring a river through a river, light through light. She saw the changes as subtle shifts in color, patterns. Her hands danced through the other woman's ch'i.¹⁰ It was done. Enough. (*FST* 187)

The hand Madrone lays on Isis's thighs first seems to do without the deconstructionist view of touch as an outside touching another outside: it feels Isis's "firm muscle underneath" so that the boundary of skin is evaded. However the following zeugma (Madrone feels the muscle and "desire like an electric skin") complicates the process. Is it Madrone's or Isis's desire? This one touch ascribes them a desire that is presumably common, yet the metaphorical "electric skin" brings apart what desire brings together. The skin is precisely what had been evaded in feeling Isis's muscle. It is the outside touching the outside, essential yet forbidding. This skin is electric, so that the safety of

10 Starhawk borrows the mythical concept of *ch'i* or *qi* as the vital force from traditional Chinese medicine.

matter is made unstable by the energy of electricity: should one touch an electric skin? The skin is both intensely *there* and impossible to picture and thereby constitutes a first embodiment of the interval mentioned by Nancy, Derrida, and Jackson commenting on them. Even though it is not geographical, since it does not have any relationship with spatial localization, it introduces the trope of an electric fence and the possibility of trespassing. Then comes an inkling of Isis's past as a slave, a "fantastic pet". Indeed, Isis was raised to be an athlete to be cheered and a sex-slave to be exploited by the higher classes of the Southlands. In spite of all its contradictions, Madrone's touch has delivered essential, if imprecise, knowledge.

This touch generates a first travel inside Isis's body, where Madrone feels "the hormones that 6 flowed from glands and swam in the blood". Isis's body is then seen as a landscape and through this spatialization, touch becomes able to embrace the body as a whole. There is a startling simultaneity in the way Madrone feels blood and hormones all at once, as if she was a marine creature able to tell one kind of fluid from another. At other points in the novel, Madrone also "swims" in her own "clear serum", and notes that the "stream felt healthy, full of life" (FST 193). Those fluid landscapes partake of a general ecofeminist aesthetics favoring fluids over solids and curves over angles. Similarly, the inside of most bodies are replete with hollow places and crannies (FST 4, 205). However, those recurrent streams where main characters swim thanks to the psychic knowledge they often gain through touch are also a way to have touch interfere at yet another level: when one is immersed in water, one's own body as a whole is touching a fluid as a whole. As D. H. Lawrence puts it in "Fish": "But oh, fish, that rock in water, /You lie only with the waters; /One touch".¹¹ Within such environments, the only sense that fully functions is touch, and there is only ever one touch at a time. Through the fluid trope, Starhawk therefore succeeds both in mapping the knowledge gained through touch and superimposing a wholesome kind of touch to the necessarily distanced touch provided by the hand.

The travelling is taken up at skin level as "Madrone's hands traveled to the pirate's throat and the center of her forehead". This new touch yields another landscaped image, thus carving further space at the heart of the most immediate touch. Here, space is saturated with the flow of an artificially strong river. While the first glimpse is immediate ("an image came"), it is followed by the unravelling of several layers of knowledge. The space at the heart of this act of touching is a river; then it is a river whose bed is at risk of collapsing. There is too much pressure, things are too much in contact with each other in that water-logged landscape, so that there is touch, still, at the

11 D. H. Lawrence, Complete Poems, 334.

heart of the space that is at the heart of touch. It emerges from this reading that I am not distinguishing between the spacing/interval in the deconstructionist approach to touch and the landscaped vision of touch endorsed by Starhawk as I see the latter as a literalization of the former. Then come both the healer's analysis (what can and what cannot be remedied) and an analogy: the flow stands for the hormones that are overstimulated by the booster. The abrupt return from metaphorical river to literal glands functions as another rift, as if parsing things out meticulously came at once with healing through touch.

The next and last act of touching is the actively healing one. It is a touch that is active, and this time the saturation of contact, the sameness of the things that touch each other ("pouring a river through a river, light through light") as well as the quick result expressed in short sentences ("it was done. Enough") all point towards a newly retrieved immediacy. "Her hands danced through the other woman's ch'i"¹² synthesizes this fresh state in which the touching hand and the touched body now apprehend each other, a dance standing here for an immediate need, an unimpeded movement and minute and numerous adjustments. Having attained, or retrieved, this level of immediacy, touch can heal, and Madrone can soothe Isis.

^{9.} The literalization of the spacing at the heart of touch may serve a particular purpose when applied to the healing touch which is so often prominent in Starhawk's novel. Retracing the instances of healing touches in the West from Jesus to contemporary tactile healers, Constance Classen identifies two strands in the history of therapeutic touch: "one concerns touch as a medium of supernatural influences (as in the royal touch), the other deals with natural healing powers of touch (as in physiotherapy)".¹³ Starhawk, by reconciling the immediate and the mediated, by providing an almost instantly accessible representation of the process of touch through those bodily landscapes, may very well bring together those two strands. On the one hand, Madrone's healing touch answers supernatural criteria as she frequently liberates or pumps ch'i, a vital flow, into her patients; on the other hand, the minute description and the landscaping of her touching process follow the linear temporality of a more modern- like type of medicine working with trial and error. That may be why her evocations of healing touches appear so powerful.

^{10.} When a body touches another body in *The Fifth Sacred Thing*, then, the space at the heart of touch is literalized thanks to the speculative nature of the fiction. Yet even within that literalized space, presence and contact remain utmost just as they are being negated. Those landscaped bodies

¹² The Fifth Sacred Thing often refers to the traditional Chinese concept of *ch'i*, the vital force of all living beings.

¹³ C. Classen, The Book of Touch, 349.

accessed through touch oscillate between two poles. One pole privileges a dense, saturated representation of matter: those inner landscapes are mostly fluid and opaque. The other pole reasserts the presence of that space. The body is travelled as a landscape; it is an extended view of matter, with numerous hollows and strong visual aspects ("an image came", or "she saw the subtle changes as shifts in colors, patterns"). In that sense, speculative fiction concentrates a tension between immediacy and mediation. On the one hand, it displays a will to return to a phenomenological haptic tradition, which stands in line with an ecofeminist view of epistemology for whom the predominance of sight implies a distance imposed onto women and the environment by patriarchy; on the other hand, it acknowledges that deconstruction, its implicit claim that mediation is always already there, and its drive to overturn a centuries-old established order, can complicate our understanding of touch in fruitful ways.

Touching patterns (cognitive neuroscience)

In Incarnating the spacing at the heart of touch by depicting a landscape that is both inside and outside the touched body is one of the most striking ways in which the speculative nature of *The Fifth Sacred Thing* can supplement philosophical intuition. A minor correlation of this mapping through touch is an insistence on the close relationship between touch and pattern. Haggard and Giovagnoli define the tactile field in the following terms:

Spatial pattern perception involves perceiving the angles, distances and forms created by *multiple* tactile stimuli. For example, judging whether three tactile stimuli are colinear requires representing the spatial relations *between* the stimuli within a continuous common space, or *tactile field*. We use this term, by analogy to the 'visual field', to mean the "spatial array of ... sensations" available to perception (Smythies, 1996).¹⁴

Generally the existence of a tactile field based on the same criteria as a visual field is considered uncertain.¹⁵ Therefore touch is not generally deemed by cognitive neuroscience as able to perceive any kind of pattern with immediacy, since acquiring a sense of the shape or pattern of an object implies delineating it rather than capturing it in one touch. The linear temporality of touch appears essential to the tactile perception of pattern. In the examples to follow, the necessary temporality of touch is not eschewed, yet immediacy is expressed with other devices in the narrative. Here, Maya, Madrone's surrogate grandmother, tries to strengthen her granddaughter after a healing session that

¹⁴ P. Haggard and G. Giovagnoli, "Is There a Tactile Field?", 65.

¹⁵ Ibid., 66.

has left her particularly weak. She first touches Madrone's hand:

Her hand was cold; it felt like one of the flexible ice packs they used to keep in the freezer for Alix to lie on when her back gave out. "Where you are is so cold".

The touch of the heart, Maya thought. If Madrone could feel that, it could save her. And if not, there was truly nothing Maya could do except to let her go. Losing and finding and losing again. Loosing her. *[sic]*

Cold was a pattern too, like a pinwheel of lace spinning in her back. And suddenly, Madrone wanted to reach for the warmth of Maya's hand. Maya's touch was a glow of fire that shattered the ice crystals around her. It was a living pattern of its own that throbbed with a red-blood beauty, beating like a heart. She could feel Maya's pulse. Her own blood sang weakly in her body as it moved and traveled the web of her veins. (*FST* 114)

Maya soon realizes that the cold that is the tactile translation of Madrone's weakness is a "pattern". Touch has afforded her with this immediate knowledge while the pattern itself does not yield to immediate perception. While the revelation seems instantaneous for Maya, it is not so for the reader. How is "cold" a pattern, and how can this epiphany lead to the healing touch that will save Madrone? My suggestion is that Maya's ability to sense "cold" as a "pattern" and not as a uniform sensation comes from Starhawk's representation of certain characters in her novel as able to perceive, through touch, complex shapes such as patterns with an immediacy that is usually reserved to simple sensations or objects. I see that ability as kin to that of a tactile field (yet another spatialization of perception), whose existence in humans is still being debated.

Then, Maya's ability to touch actively (rather than in the more "passive" mode of touch as perception) becomes in turn "a living pattern of its own that throbbed with a red-blood beauty, beating like a heart". Maya's enjoyment of a tactile field, uncertain in cognitive neuroscience, is made possible in speculative fiction. As Haggard and Giovagnoli insist that "many studies emphasize the contribution of active touch to spatial pattern perception", it is no surprise that the pattern-like aspect of the thing touched becomes that of the touch itself. The vision of her own touch as a pattern leaves us with two, perhaps coexisting, possibilities: since touch is seen as a healing action throughout the book, and since it is the most reciprocal of the senses since there is perception both on the side of the touching and of the touched subject, the first possibility is that Maya's touch becomes able to morph into the mode that it has perceived (pattern), and thereby address the ill and cure it. This amounts to an ecofeminist ethos of non-invasive relationships, and echoes Berrard and Choullet-Vallet's view of *contact*, in relationships of care, as a type of touch which takes into account both one's own position in the world and the adjustments necessary to a

respectful relationship with the touched subject.¹⁶ It is further illustrated by the change in point of view, from Maya in the first two paragraphs to Madrone in the third one, with the realization that "cold was a pattern, too" as a turning point.

The second possibility takes another ecofeminist path: it is a further embodiment, in the throbbing flesh of Maya's patterned touch, of what happens when one perceives a complex object through touch. When Haggard and Giovagnoli analyze the process of spatial pattern perception, they map out the mental construction which is an essential part of perception as they mention the necessary entanglement of touch with proprioception:

(...) when we haptically explore an object and perceive metric properties such as object shape (Klatzky and Lederman, 2003, Lederman and Klatzky, 2004, Reed et al., 2005), the spatial percept depends on proprioceptive information about body movement, while tactile information may be confined to a single point such as the fingertip. In Molyneux's example (Evans, 1985), one might identify a cube by tracing its edges with a fingertip. The resulting *tactile* sensations might have almost no spatial variation across the skin at all.¹⁷

In our case of pattern perception, this second, mental image of the cube is no longer just one step in the epistemological path of touch but becomes a synecdoche for the whole process of touch. From an ecofeminist perspective and with a speculative twist, the touched pattern becomes the touching pattern — proprioception is combined with an acute sense of touch and the result is an action that is so fully embodied that it "throb[s] like a red-blood beauty, beating like a heart". Besides, a return to the primal pulse of the body serves the ecofeminist affiliation to phenomenology, involving the primacy of lived and embodied experience over the distancing imposed by mind-body dualism.

A similarly idiosyncratic relationship between touch and patterns appears in *The Stone Gods*. This speculative novel by Jeanette Winterson is partly set in a futuristic past where humans have ruined their own planet, *Orbus*, and embark on the colonization of another planet which they will ruin even faster thanks to a male-dominated ideology of terraforming (which we could redefine as a radical version of the invasive kind of touch theorized by Berrard and Choulet-Vallet). In the novel, as Billie, the protagonist, falls in love with an android named Spike, touch also yields an understanding of the touched other as a pattern:

We made love by our fire, watching the snow shape the entrance to the cave.

When I touch her, my fingers don't question what she is. My body knows who she is. The strange thing about strangers is that they are unknown and known. There is a pattern to her, a shape I

¹⁶ A. Berrard and A. Choulet-Vallet, « Mettre en contact plutôt que mettre à distance », 114.

¹⁷ P. Haggard and G. Giovagnoli, "Is There a Tactile Field?", 66.

understand, a private geometry that numbers mine. She is a maze where I got lost years ago, and now find the way out. She is the missing map. She is the place that I am.

She is a stranger. She is the strange that I am beginning to love.¹⁸

When Billie touches Spike, she does not come into contact with body parts but with a "pattern". As in Starhawk's healing scene, the means involved in the touch-induced perception of a pattern let us think that Billie, at least in this context, enjoys the kind of immediate knowledge through touch provided by the presence of a tactile field. Indeed, Billie's touch does not vield a gradual understanding of Spike and her identity¹⁹ (in that case, whether she is somehow human, whether she can love and feel pleasure), but a wholesome, synthetic understanding and embracing of Spike's being. Beyond her fingers, Billie's body is involved as a whole in this perceptive act. Speculative literature thus furthers the potential of touch hinted at in scientific studies. Haggard and Giovagnoli stress the importance of an extended tactile organ in their assessment of the possibility of the existence of a tactile field. They call this requirement "skin-space"²⁰ and therefore concentrate on palms or forearms, but argue that an individual's supposed tactile field is "broken" at the level of joints, so that "the tactile field is not defined only in skin-space, but also reflects the segregation of the body into parts, at least at the wrist".²¹ In the case of Billie and Spike, there is no such break: Billie gets lost as a whole in the "maze" of Spike's body. Similarly, the currently developing field of neuroscientific analysis of affective touch focuses mostly on the response of the touched person, amongst which their proprioception,²² or to a much lesser degree, on the response of the person promoting affective touch, but in that latter case, it is the person's feelings on the touch and not on their own body that is being examined.²³ Here as well, by offering a sense of the affective touch giver's proprioceptive response, fiction explores an area of neuroscience that has not yet been probed or may be represented with difficulty. Finally, in a fascinating posthuman twist, Billie, the human character, assumes with her touch the synthetic or computing abilities traditionally more easily ascribed to an artificial intelligence and therefore to the object touched, Spike.

¹⁸ J. Winterson, The Stone Gods, 88.

¹⁹ This would tie in with a traditional characterization of the sense of touch as diachronic as exposed by Matthew Ratcliffe quoting O'Shaughnessy: "According to O'Shaughnessy, touch, unlike vision, usually has a diachronic structure. We explore the world with touch, whereas "the contents of a visual field are simultaneously presented to view" by vision (1989, p. 44)", "Touch and Situatedness", 3.

²⁰ P. Haggard and G. Giovagnoli, "Is There a Tactile Field?", 65.

²¹ Ibid., 71.

²² See for example L. Crucianelli and M. L. Filippetti, "Developmental Perspectives on Interpersonal Affective Touch", 575.

²³ See for example A. Mazza et.al, "Hedonic and Autonomic Responses in Promoting Affective Touch".

New materialist touch (Barad, Haraway)

Touching patterns, therefore, bring forth another mode for speculative fiction to embody and expand the possibilities afforded by touch. In *The Fifth Sacred Thing*, the realization that a tactile sensation, "cold", is a pattern, leads to a change in viewpoint, from Maya to Madrone, as well as to the transfer of the image of a pattern from the touched object to the touching subject. In *The Stone Gods*, the pattern that is Spike's body under Billie's touch is also transferred to Billie's body, in the image of "a private geometry that numbers mine". If Maya and Billie are ascribed an extended tactile field, they are also gesturing towards a superimposition that is another aspect explored in speculative ecofeminist fiction: the exchange of qualities between the touching and the touched. This comes as an echo of the phenomenological claims of the flesh of the perceiver coming into contact with the flesh of the world and recognizing its similarity. And yet, since speculative fiction is often also science fiction, a physicist's explanation within a new materialist epistemology (whose links with feminism has been often stated) seems more adequate. In *Meeting the Universe Halfway*, Karen Barad discusses the similarity between the scanning tunneling microscope's way to "see" and a human's sense of touch in the following terms:

The distinction between physical touch and the interaction between the microscope tip and the sample is not as great as one might think. "Touching" as we know it in our everyday lives is an electromagnetic interaction, a repulsion between electron clouds that don't so much "touch" in the sense of encountering each other's boundaries through physical contact as sense one another's electron clouds; and furthermore, the gap between the tip and the surface atoms involves a separation of a mere few nanometers, so the question of whether this is "really touching" in the sense of physical proximity is moot.²⁴

More than a material transfer of qualities, perhaps, what is at stake when a touching pattern recognizes a touched pattern and vice-versa (and the idea of a pattern also fits better with a new materialist electron cloud than with a traditional, solid conception of matter) is that the patterns are sensing each other and recognizing their kinship as much as their discreteness, "sens[ing] one another's electron clouds".

^{16.} Winterson complicates this scheme of interpenetration through touch in Spike's address to Billie, just before the latter sets off for a hazardous mission: "Spike came forward and put her arms round me. 'One day, tens of millions of years from now, someone will find me rusted into the mud of a world they have never seen, and when they crumble me between their fingers, it will be you they find'" (*SG* 79). Because she is what Winterson names a "Robo *sapiens*", Spike is perhaps even 24 K. Barad, *Meeting the Universe Halfway*, 411.

more easily penetrated and changed by touch than Billie. She first enfolds Billie; then, several million years later, she is oxidized by the mud that enfolds her, before she is turned into crumbles by the fingers that find her. Every time, she becomes each of those instances while keeping the imprint of the previous ones, to the point that the first enfolding before Billie sets off becomes the shape her crumbles take million years later, as Billie will be found inside Spike's crumbles. In the vein of Karen Barad, this image appears as a literally posthuman instantiation of Haraway's claim that "the people and the things are in mutually constituting, intra-active touch"²⁵ and knowing through touching appears to mean being able to trace the chains of touch any entity has gone through before coming into contact with us. Spike gives a further vision of this idea when she declares: "The universe is an imprint. You are part of the imprint — it imprints you, you imprint it. You cannot separate yourself from the imprint, and you can never forget it" (SG 86). She then weaves it again with touch: "She touched my face. 'I will never forget you. I can never forget you". (SG 87). Barad and Haraway both insist on the extension of our understanding of touch to morethan-human entities, whether nonhuman animals (Haraway) or artificial devices such as the scanning-tunneling microscope (Barad). And indeed, touch as interpenetration goes hand in hand, in Winterson's Stone Gods, with an ability of artificial "skin" to sense and react. Spike's touch is the best example of this, but there are other ones that are just as unsettling. In the dystopian planet which Billie and Spike have fled, the buildings have "smart skins" (SG 13) and walls can be hurt: "I threw an egg at the wall. 'Oh ! ' said the wall, complainingly, no need for vi - o - lence''' (SG 43).

17. Even though Starhawk's *The Fifth Sacred Thing* is less explicitly interested in nonhuman sentience, the novel harbors many hints of both interpenetration through touch and a nonhuman haptic perspective, especially on the part of water:

She had never really appreciated the stuff before, how crystalline and transparent it was, how eager to take the form of its container, how it shaped and molded everything it touched. These hills, this flat bed of land, the course of the stream, the physical properties of the trunks of trees, the rounded shape of the stone in her pocket, her own body's form and the texture of her skin — everything on earth was some revelation of water. (*FTS* 204)

The idea of a touch that shapes, molds, but also reveals and is revealed in the shapes it gives to things in the world undoubtedly echoes the new materialist ontology expressed in Haraway and Barad's understanding of touch. However, it also brings us back to the deconstructive understanding of touch sparked by Derrida and Nancy. Touch, initiated, received, by humans and/or nonhumans, is both immediate in the way it lets bodies interpenetrate and mold each other, and prone to revealing 25 D. Haraway, *When Species Meet*, 6.

Le Toucher

the whole history of the bodies touching. In the little time it takes the touching and the touched to access what Starhawk names "revelation", and Winterson, "imprint", lies ecofeminist speculative fiction's version of the spacing at the heart of deconstructed touch.

Because of their ecofeminist stance, *The Fifth Sacred Thing* and *The Stone Gods* are extremely sensitive to touch as an epistemological tool that unsettles the primacy of sight in the mainstream male dominated, anthropocentric culture. Because of their speculative quality, they enjoy a certain level of leeway to literalize the complexity of touch. Thanks to images of tactile experiences as landscapes and patterns, they dive into, spell out and embody the main epistemological questions surrounding touch: mediacy for deconstructive thinking; the moot existence of a tactile field for cognitive neuroscience; and the shaping and readable imprints of touch for new materialism. As a synthesis may have been reached in the last passage on the agency of water through touch, further research on such speculative fiction should bear on touch as an agential and epistemological tool for more-than-human beings, just as fiction reveals itself to be a powerful agential tool to reconsider more-than-human touch.

Works Cited

- BARAD, KAREN. Meeting the Universe Halfway: Quantum Physics and the Entanglement of Matter and Meaning. Durham, London: Duke University Press, 2007.
- BERRARD, ANNA AND CHOULET-VALLET, ANAÏS. « Mettre en contact plutôt que mettre à distance le monde sensible. Pour une épistémologie écoféministe du toucher ». *Tracés. Revue de Sciences Humaines* 42. Paris: ENS Editions, 2022.
- CLASSEN, CONSTANCE. The Book of Touch. Oxford, New York: Berg, 2005.
- CRUCIANELLI, LAURA AND FILIPPETTI, MARIA LAURA. "Developmental Perspectives on Interpersonal Affective Touch". *Topoi* 39.3 (2020): 575-586.
- DERRIDA, JACQUES. On Touching Jean-Luc Nancy. Trans. Christine Irizarry. Stanford: Stanford University Press, 2005.
- HAGGARD, PATRICK AND GIULIA GIOVAGNOLI. "Spatial Patterns in Tactile Perception: Is There a Tactile Field?" *Acta Psychologica* 137 (2011): 65-75.
- HARAWAY, DONNA J. When Species Meet. Minneapolis, London: University of Minnesota Press, 2008.

- JACKSON, SARAH. *Tactile Poetics: Touch and Contemporary Writing*. Edinburgh: Edinburgh University Press, 2015.
- LAWRENCE, D. H. Complete Poems. Ed. Vivian de Sola Pinto and Warren Roberts. London: Penguin, 1993.
- MAZZA, ALESSANDRO, ET. AL. "Hedonic and Autonomic Responses in Promoting Affective Touch". *SciRep* 13.1 (2023): 11201.
- NANCY, JEAN-LUC. Corpus. Trans. Richard A. Rand. New York: Fordham University Press, 2008.
- RATCLIFFE, MATTHEW. "Touch and Situatedness". *International Journal of Philosophical Studies* 16.3 (2008): 299-322.
- SPIVAK, GAYATRI CHAKRAVORTI. "Translator's Preface". DERRIDA, JACQUES. *Of Grammatology*. Trans. Gayatri Chakravorty Spivak. Baltimore: John Hopkins University Press, 1976.

STARHAWK. The Fifth Sacred Thing. New York: Bantam Books, 1993.

WINTERSON, JEANETTE. The Stone Gods. Penguin Books, 2015.

WOLFE, CARY. What Is Posthumanism? Minneapolis: University of Minnesota Press, 2010.