Touching Visions

The affective, ethical, and practical engagements of caring invoke involved embodied, embedded relations in closeness with concrete conditions. And yet I am exploring care for a speculative ethics. Embracing the tension between the concrete and the speculative, this chapter engages with paths to the reembodiment of thinking and knowing that have been opened by passionate engagements with the meanings of "touch." Standing here as a metonymic way to access the lived and fleshy character of involved care relations, the haptic holds promises against the primacy of detached vision, a promise of thinking and knowing that is "in touch" with materiality, touched and touching. Yet the promises of this onto-epistemic turn to touch are not unproblematic. If anything, they increase the intense corporeality of ethical questioning. In navigating the promises of touch, this chapter attempts to exercise and expand the disruptive potentials of caring knowing that this book explores. It attempts to treat haptic technologies as matters of care, and in doing so continues unpacking and coshaping a notion of care in more than human worlds.

Unfolding and problematizing the possibilities of touch draws me into an exploration of its literal as well as figural meanings. I follow here the enticing ways opened in theory and cultural critique to explore the specificity and interrelation of different sensorial universes (Rodaway 1994; Marks 2002; Sobchack 2004; Paterson 2007). All senses are affected by these reexaminations of subjectivity and experience, but touch features saliently, as a previously *neglected* sensorial universe, as a metaphor of intensified

relation. So why is touch so compelling? And what new implications for thinking are being suggested by invoking touch?

Attention to what it means to touch and to be touched deepens awareness of the embodied character of perception, affect, and thinking (Ahmed and Stacey 2001; Sedgwick 2003; Blackman 2008). Understanding contact as touch intensifies a sense of the co-transformative, in the flesh effects of connections between beings. Significantly, in its quasi-automatic evocation of close relationality, touching is also called upon as the experience par excellence where boundaries between self and other are blurred (Marks 2002; Radcliffe 2008; Barad 2012). The emphasis on embodied interaction is also prolonged in science and technology studies, for instance, by exploring "the future of touch" as made possible by developments in "robotic skin" (Castañeda 2001). Drawing attention to laboratory touching devices can also highlight the materiality and corporeality of subject-object "intraactions" in scientific practices, missed out by epistemologies founded on "representation" that tend to separate the agencies of subjects and objects (Barad 2007). Touch emphasizes the improvisational "haptic" creativity through which experimentation performs scientific knowledge in a play of bodies human and not (Myers and Dumit 2011, 244). And engaging with touch also has political significance. In contrast to expecting visible "events" that are accessible to or ratified by the politics of representation, fostering of "haptic" abilities figures as a sensorial strategy for perceiving the less noticeable politics in ordinary transformations of experience missed by "optic" objectivist representation (Papadopoulos, Stephenson, and Tsianos 2008b, 55). Here, haptic engagement conveys an encouragement for knowledge and action to be crafted in touch with everyday living and practice, in the proximity of involvement with ordinary material transformation. I read these interventions as manifesting a deepened attention to materiality and embodiment, an invitation to rethink relationality in its corporeal character, as well as a desire for concrete, tangible, engagement with worldly transformation—all features and meanings that pertain to the thinking with care that I am exploring in this book.

Embodiment, relationality, and engagement are all themes that have marked feminist epistemology and knowledge politics. Exploring meanings of touch for knowledge politics and subjectivity prolongs discussions

regarding situated and committed knowledge initiated in chapters 1 and 2. To think with touch has a potential to inspire a sense of connectedness that can further problematize abstractions and disengagements of (epistemological) distances, the bifurcations between subjects and objects, knowledge and the world, affects and facts, politics and science. Touch counteracts the sensorial metaphor of vision, dominant in modern knowledge making and epistemologies. But the desire for better, profounder, more accurate vision is more than a metaphor. Feminist critiques have questioned the intentions and the effects of enhanced visual technologies aimed at penetrating bodies to open up their inner truths.1 Engaging within this tradition of ontopolitical suspicion about visual representation, Donna Haraway proposed nonetheless that we reappropriate the "persistence of vision" as a way to engage with its dominant inheritance. The challenge is to foster "skill . . . with the *mediations* of vision" (Haraway 1991d, 191, emphasis added), notably by contesting and resisting to adopt an unmarked and irresponsible "view from nowhere" that pretends to see everything and everywhere. This embodied and situated material-semiotic reclaiming of the technologies of vision is at the heart of her reworked figure of a "modest witness" for technoscience (Haraway 1997b) that transfigures the meanings of objectivity in ways that opens possibilities for knowledge practices committed to as well as possible worlds (Haraway 1991d, 183-201).

Significantly, by embracing touch, others have also sought to emphasize *situatedness* and make a difference in cultural atmospheres strongly attuned to visual philosophical models of ways of being in the world (Radcliffe 2008, 34). Is knowledge-as-touch less susceptible to be masked behind a "nowhere"? We can see without being seen, but can we touch without being touched? In approaching touch's metaphorical power to emphasize matters of involvement and committed knowledge, I can't help but hear a familiar voice saying "theory has only *observed* the world; the point is to *touch* it"—lazily rephrasing Marx's condemnation of abstract thought that "philosophers have only interpreted the world . . . the point is to change it." And yet, the awareness, suggested in previous chapters, that knowledge-making processes are inseparably world-making and materially consequential does evoke knowledge practices' power to touch—and

commitment to keep in touch with political and ethical questions at stake in scientific and other academic conversations.

Engaging in discussions that are revaluing touch brings me back to the paradoxes of reclaiming. Reclaiming technologies of vision entailed reappropriating a dominant sensorial universe and epistemological order, seeking for alternative ways of seeing. The poisons encountered in these grounds are optic arrangements that generate disengaged distances with others and the world, and claims to see everything by being attached nowhere. In contrast, much like care, touch is called upon not as dominant, but as a *neglected* mode of relating with compelling potential to restore a gap that keeps knowledge from embracing a fully embodied subjectivity. So how, then, is reclaiming touch opening to other ways of thinking if it is already somehow an alternative onto-epistemic path? The reclamation of the neglected is in continuation with the thinking strategy encountered in the previous chapters: thinking from, with, and for marginalized existences as a potential for perceiving, fostering, and working for other worlds possible. But these ways of thinking don't need to translate in expectation that contact with the neglected worlds of touch will immediately signify a beneficial renovation. On the contrary, to reclaim touch as a form of caring knowing I keep thinking with the potential of marginalized oppositional visions to trouble dominant, oppressive, indifferent configurations, a transformative desire that also requires resisting to idealization. When partaking in the animated atmosphere of reclamations of touch, there is a risk of romanticizing the paradigmatic other of vision as a signifier of embodied unmediated objectivity. Rather than ensuring resolution, thinking with touch opens new questions.

The Lure of Touch

Like others, I have been seduced into the worlds of touch, provoked and compelled by the very word, by the mingling of literal and metaphorical meanings that make of touch a figure of intensified feeling, relating, and knowing. Its attractiveness to the project of this book, however, is not only that of evoking a specifically powerful sensorial experience but also that of providing the affective charge that makes it a good notion to think about the ambivalences of caring. Starting with being touched—to be attained,

moved—touch exacerbates a sense of concern; it points to an engagement that relinquishes detached distance. Indeed, one insight often advanced about the specificity of experiencing touch (often supported by references to Merleau-Ponty's phenomenology) is its "reversibility": when bodies/ things touch, they are also touched. Yet here already I wonder: to touch or to be touched physically doesn't automatically mean being in touch with oneself or the other. Can there be a detached touch? Unwanted touch, abusive touch, can induce a rejection of sensation, a self-induced numbness in the touched. So maybe we have to ask what kind of touching is produced when we are unaware of the needs and desires of that what/whom we are reaching for? This resonates with the appropriation of others' through caring that I discussed in the previous chapters; the troubling character of these dynamics is exacerbated when thought can be conceived as a corporeal appropriation through "direct" touch.

These questions become more pressing when facing touch's potentially totalizing signification: touch, affirms Jean Louis Chrétien, is "inseparable from life itself" (Chrétien 2004, 85). I touch, therefore I am. There is something excessive in that we touch with our whole bodies, in that touch is there all the time—by contrast with vision, which allows distant observation and closing our eyes. Even when we are not intentionally touching something, the absence of physical contact can be felt as a manifestation of touch (Radcliffe 2008, 303). Moreover, to be felt, sensorial and affective inputs that other senses bring to experiencing necessarily pass through material touching of the body. This total influence contributes to a sense of "immersion" (Paterson 2006, 699) and is incarnated in its atypical, allencompassing organ, the skin (Ahmed and Stacey 2001). Touch exhibits as much ascendancy as it exposes vulnerability.

Touché is a metaphorical substitute for wounded. The way in which touch opens us to hurt, to the (potential) violence of contact, is emphasized by Thomas Dumm, who reminds us that touch comes from the Italian *toccare*, "to strike, to hit." Dumm's meditations on touch are particularly illuminating regarding its ambivalent meanings.² Touching, he says, "makes us confront the fact of our mortality, our need for each other, and, as [Judith] Butler puts it, the fact that we are undone by each other" (Dumm 2008, 158). In contrast, Dumm explores two meanings of becoming *untouchable*.

First, the loss of somebody we cared about that makes this person untouchable: "that which we imagine as part of us is separate now" (132). Second, to become oneself untouchable: "a figure of isolation, of absolute loneliness" (155).

But how would becoming untouchable, to undertake a protective disconnection with feeling, be possible given the omnipresence of bodily touch? Total presence of touch doesn't necessarily entail awareness of its influence. Dumm makes us see that rejecting touch is possible and sometimes necessary to survive hurt. Yet if such shielding becomes entire, it entails a negation of life itself. The unavoidable ambivalence of touch is thus of conveying a vital form of relation and a threat of violence and invasion. Dumm unfolds Ralph Waldo Emerson's avowal of feeling untouched by the death of his son and his affirmation that touching is both "an impossible act" and necessary for becoming "actors in the world of experience." Dumm concludes that losing touch is a flight into the "futility of total thought," while touching is a turn to the "partial nature of action," a move "from transcendence to immanence, from the untouchable to the embrace of corporeal life" (Dumm, 158, emphasis added). Life is inevitable mortality, partiality, and vulnerability: the troubles and conditions of living. Trust might be the unavoidable condition that allows this openness to relation and corporeal immanent risk.

Exposure through touch translates into another emblematic extreme often associated with touch, healing: "If I only touch his garment, I shall be made well," thinks a sick woman approaching Jesus (Matthew 9:21). This biblical verse came to mind as I encountered the logo for a company developing three-dimensional anatomical simulation software for medical learning purposes—TolTech—*Touch of life technologies*. It featured two human hands, index fingers extended to touch each other, invoking the divine connection between God and Adam represented by Michelangelo and his apprentices on the ceiling of the Sistine Chapel. However, offering "the ability to approach the human body from any combination of traditional views," Touch of Life's version referred to the enhanced vision of anatomical parts via 3D technologies that could bring medical practitioners in training closer to a re-creation of actually touching them. The image was science-fiction oriented, offering a first-contact extraterrestrial-like sight of two

index fingers at the point of touching, contrasted against an outer-space dark blue background. An uncanny light had been depicted emanating from the space close to this not-yet-accomplished contact, producing circling waves of brilliance that contour supernatural hands. The technobiblical imagery invoked by this vision of medical technology appealed to ancestral yearnings of healing transformation, and maybe salvation, through embodied and direct contact with a powerful technoscientific (godlike) promise.

Touch is mystical. Touch is prosaic. Though neither scientific nor political cultures have ever been (totally) secular, there is, however, a sensible way in which embodied contact with evidential knowledge is associated with the material rather than the spiritual. This connection is supported by a long history in which concrete, factual, material knowledge is opposed to "bare" belief. Remaining in the biblical imaginary, we can remember Saint Thomas, who became the paradigmatic doubter, manifesting human weakness in his need to touch Jesus in order to believe the news of his resurrection. In declarations following the explosion of the financial speculative bubble leading to the 2008 financial crisis, Benedict XVI, the catholic pope in office at the time, encouraged people to hold on to beliefs that are not based on material things. He warned that those who think that "concrete things we can touch are the surest reality" are deceiving themselves.4 This time, touch falls decisively on the side of prosaic knowledge; it serves the doubtful, those who need to get hold of something, while faith belongs to trust in untouchable immaterial forces. During the first years of the crisis, my bank was nationalized after it threatened to collapse. It struck me how, months later, its offices still exhibited posters of a campaign inviting clients to give up "paper titles" in favor of digitalized ones with the slogan: Dematerialisation. Inform yourself here.⁵ Pope Benedict XVI was clearly out of touch with what critics of the imploded financial system had been relentlessly highlighting: the immaterial and unreal character of a speculative bubble frantically inflated by global markets disconnected from the finite material resources of people and this planet. Dematerialized, financialized wealth. From this perspective, it was not so much the materiality of things we can touch that led to the global financial meltdown in 2008 but their deadly negation by a "delirious," out-of-touch capitalist version of the speculative (Cooper 2008).

My point here is not to refute faith in the ungraspable, nor the appeal of touching the concrete. I am just realizing how easily an inclination for touch as a way of intensifying awareness of materiality and immanent engagement can get caught in a quarrel about what counts as real and authentic, worth of belief and reliance. Whether this "real" is a source of divine promise or of tangible factuality, authenticity is at play. This aspiration to the truthful is reproduced by promises of enhanced immediacy and intensified *reality* in computing experience that abound in the research markets of innovative haptic or touch technologies. If seeing stands for believing, touching stands for feeling (Paterson 2006). Here, to feel becomes the ultimate substantiation of reality, while seeing is expelled from genuine feeling, and believing's authenticity rate plummets. The rush to the "material" in reclamations of touch made me wonder if the increased desire for touch manifests an urge to rematerialize reliability and trust within a technoscientific culture fueled by institutionalized skepticism? In other words, could the yearning for touch manifest also a desire to reinfuse *substance* in more than human worlds where digitalized technology extends and delocalizes the networks and mediations that circulate reliable witnessing?

Touching Technologies

The reclamation of touch is a wide cultural phenomenon with relevance for ethical speculative considerations. One can just think of how the boom of touch technologies, a market only growing, mobilizes a vast range of more than human reassemblages. How these technologies are made to matter is concomitant with how they transform what matters. Touch technologies emerged in the early 2000s as a promise of what Bill Gates proclaimed to be the "age of digital senses." They "do for the sense of touch what lifelike colour displays and hi-fi sound do for eyes and ears," announced *The Economist* in the early days of haptic hype. The time to lick and sniff keyboards and screens is yet to be trumpeted. For now, technology is "bringing the *neglected* sense of touch into the digital realm." These emerging haptic technologies engaged with a new frontier for the *enhancing* of human experience through computing and digitalized technology. As transhumanist speculations, promises, and expectations about the

"innovative" prospects of touch for people in technoscience they constitute a massive matter of investment in a future in which smartphones and other handy devices are only gadget sprouts.

Though here I focus on problems posed by the imaginaries of enhancement in everyday experience, the proliferation of applications is vast. Haptic or touch devices are implemented, or fantasized, in relation to many different technologies: for developments of touch sensors in precise industrial robotics9; for the creation and manipulation of virtual objects; to allow a feel of materials in video games; to enhance sensorial experience in varied simulators (surgery, sex) and other devices aimed at distant control and operation. They also refer to technologies allowing direct command of laptops and phones through the screen. From the most sophisticated and specialized to the most banal gadgetry, the marketing of these developments uses exciting language that engages play, dexterity of manipulation, augmented or enhanced reality, and experiences of sensorial immersion that mimic the real thing, all driven by promises of more immediate connection at the heart of cultural imaginaries of affection. The sense of materiality of contact can take opposed implications; for instance, exposure remains connected to vulnerability so that if it may seem particularly exciting to touch and manipulate "virtual" entities. In other contexts it is reassuring to touch without being touched, to manipulate without physically touching (e.g., in military situations such as the use of drone technology or demining robotics, the viewer remains untouched, touch sensors act as mediators, and distanced bodies and unmanned artifacts receive the immediate physical consequences [Suchman 2016]).

In his essay "Feel the Presence," the haptic geographer Mark Paterson describes these technologies of "touch and distance" and their possibilities of concrete and immediate manipulation of objects, virtual or not. Others and things can be located far away but become "co-present" (Paterson 2006). Paterson explains how adding touch to visual effects produces a sense of "immersion," how these technologies give a feeling of "reality," enhancing the experience of users. However, he shows that the efforts to reproduce and "mimic" tactile sensation are actually productive, performative. An active reconstruction of the sensorial is at stake when developers

discuss what will be the *right* feel of a virtual object to implement within the actual design. The transformation of sensorial experience doesn't occur only through *prosthesis* but participates in the "interiorization of technological modes of perceiving" (696; Danius 2002). In other words, touch technologies as more than human assemblages could be remaking what touching means. Inversely, I would add, haptic technology works with the powerful imaginary of touch and its compelling affective power to produce a touching technology, that is, an appealing technology.

Exploring the kinds of more than human worlds that are brought to matter through celebrations of technotouch requires attention to meaningproducing effects emerging in specific configurations. It is not so much a longing for the real that is the problem of sociotechnological arrangements that conceal material mediations while pretending quasi-transparent immediacy but rather what will count as real. A politics of care is concerned by which mediations, forms of sustaining life, and problems will be neglected in the count. Which meanings are mobilized—and reinforced for realizing the promise of touch? By which forms of connection, presence, and relation is technotouch supposed to enhance everyday experience? In the technopromises of touch, "more than human" often takes the sense it has for transhumanism, that of a desire to transcend human limitations. A trend that, far from decentering human agency via a more than human reassemblage, reinforces it even if disembodied, aiming at making humans more powerful through technoscientific progress. As the protagonist of David Brin's SF novel puts it, as he collects trash from space with an extended body that connects his isolated, encapsulated, imperfect body to a distant outer space, a "more real" world is the dream:

The illusion felt perfect, at last. . . . Thirty kilometers of slender, conducting filament.

... At both ends of the pivoting tether were compact clusters of sensors (my eyes), cathode emitters (my muscles), and grabbers (my clutching hands), that felt more part of him, right now, than anything made of flesh. More real than the meaty parts he had been born with, now drifting in a cocoon far below, near the bulky, pitted space station. That distant human body seemed almost imaginary.

Dreams of technological extension beg a more specific question: Which qualities are selected for human improvement? The question of enhancement does not need us to examine any particularly extravagant sciencefiction scenarios; it is visible in the most ordinary settings. In the early days of excited hype about haptic technology, tactile technologies, a company dedicated to the development and expansion of touch screens, advertised the benefits in its promotional website.¹⁰ The first claimed advantage was speed: "Fast, faster, fastest." Touch screens cut time waste through direct touch in a world where "being one second faster could make all the difference." This directness is enhanced and integrated for "everybody," as a second advantage is promoted: "touch makes everybody an expert" by "intuitive" reaching out; "you just point at what you want." To touch is to get. Expertise would ameliorate as "touchscreen-based systems virtually eliminate errors as users select from clearly defined menus." The goal is intuitive immediacy, reduction of training to direct expertise, elimination of mistakes based on preordered selection. In conclusion, they offer a "naturally easy interface to use" for what the job requires: efficacy and speediness, reduction of training time, and keeping costs down. On top of these advantages—hands being guilty vehicles of everyday contagions—touch screens are purportedly "cleaner." This company therefore offered systems that are "not affected by dirt, dust grease or liquids." Here the driving dream is not so much of enhanced reality but enhanced effectiveness and speed. Touch stands for unmediated directness of manipulation, while hygiene worries respond to remnants of involved flesh. This is a particular vision of the more than human reassemblage offered by touch technologies, one that rather than innovating relation reinforces prevalent conceptions of efficiency—identified to accelerated productiveness. In the last chapter of the book, I will engage with how the paradigm of productivity, accelerated speed, and focus on output affects the temporality of care. What the ambivalent value of touch exposes here is that enhancing material connection does not necessarily mean awareness of embodied effects.

Computers are touching technologies in a very special way via key-boards, screens, and mouses. As somebody who spends a great amount of time behind a computer, I am not immune to the seductive hype of smooth touch screens. But as an intermittent member of the community affected

by Repetitive Stress Syndrome and other health hazards of the computerized workplace, I also wonder why possible innovations offered by these technologies for at least not worsening this epidemic are not being promoted. Many users' computing experience includes diverse ergonomic devices that make repetitive touch labor easier and dress up the cyborg imaginary of flesh wired to a keyboard (adapted mouse and keyboard, wrist and back elastic bands, microphones and voice recognition software, etc.). In order to situate keyboard-related illness as a historically collective phenomenon, it is insightful to read Sarah Lochlann Jain's account of the injury production concomitant to this device's history. Making touching technologies a matter of care requires that we learn about the possibilities overlooked by an industry in hasty development: missed opportunities to be in touch with the consequences that constant keyboard touch feedback doubled with pressures of efficiency has had on user's everyday lives (Jain 2006). Touch and proximity belong to the conceptual nebula of care, but they are not caring per se.

And yet yearnings of proximity in caring involvements mark the everydayness of computing technology. These are finely expressed in a poem by Susan Leigh Star, who also raises ambivalent feelings about promises of enhancement via technical extension:

ii
 my best friend lives two thousand miles away
 and every day
 my fingertips bleed distilled intimacy
 trapped Pavlovas
 dance, I curse, dance
 bring her to me
 the bandwith of her smell

ii
years ago I lay twisted
below the terminal
the keyboard my only hope
for work

for continuity
my stubborn shoulders
my ruined spine
my aching arms
suspended above my head
soft green letters
reflect back
Chapter One:
no one can see you
Chapter Two:
your body is filtered here
Chapter Three: you are not alone (Star 1995, 30–31)

Computers are more than working prostheses; they are existential companions for people trying to keep in touch with dislocated networks of loved ones. *My sister lives ten thousand miles away*—my parents, siblings, and friends are spread throughout the World Wide Web. A scattered heart, bleeding fingertips, and a ruined back, frustrations of "distilled intimacy," are not enough to stop efforts to remain in touch through screens. E-political communities in a globalized world also depend on virtual touching and social media props. Haptic technologies feel particularly appealing for those for whom mobility has transformed community and who have to "survive in the diaspora" (Haraway 1991a, 171). Touch technologies and longings of being in touch match well. The remaking of sensorial experience through the intensification of digital touch feeds on the marketing of proximities in the distance and our investment in longing.

Yearnings for touch, for being in touch, are also at the heart of caring involvement. But there is no point in idealizing the possibilities. If touch extends, it is also because it is a reminder of finitude (why would infinite beings yearn for extension?). And if touch deprivation is a serious issue, *overwhelming* is the word that comes to my mind when enhancement of experience is put at the forefront. Permanent *intouchness*? With what? Like care, touch is not a harmless affection. Touch receptors, located all over our bodies, are also pain receptors; they register what happens through our surface and send signals of pain and pleasure. When absorbed by work

and e-relations, these sensations take time to be perceived. We can get relatively out of touch with what bodies endure and forget the care and labor that is needed to get them through the day. There is no production of virtual relationality, whether commodified by capitalist investment or consumer society, that will not draw upon the life of some-body somewhere. Kalindi Vora shows, for instance, how the "vital energy" of callcenter workers in India is drained by the overnight labor required for keeping in touch with the needs of clients in North America to which their bodies are invisible in turn (Vora 2009b). Insisting on the many ways in which digitalized technologies engage material touching of finite flesh renders insufficient the qualification of knowledge economies and affective labors as "immaterial" (Hardt and Negri 2000, 290). More alertness to chains of touch in digital culture could also expand awareness of the layers of material mediations that allow technological connection. Besides human labor, virtual technocultures always touch something somewhere—through demands for electric power generation and the proliferation of high-tech trash (Stephenson 1996; Basel Action Network 2002; Strand 2008).11

As I have argued above, transforming purported facts and objects into matters of care by thinking with and for neglected labors and marginalized experiences is a way to remain in touch with problems erased or silenced by thriving technoscientific mobilizations. This means addressing innovatory technologies that are supposed to enhance living conditions with questions about the social relations, labors, and desires that may become obliterated through their development, use, and implementation. Such issues appear particularly relevant in another field of haptic research investment and expectations to enhance ordinary experiences. I am thinking of distant surgery where touch sensors seek dexterity in distant manipulation (Satava 2004). The rationale here is not *more* touching but improving the chain of technological mediations in order to give a sense of directness and precision of touch while accessing distant flesh and bodies. The surgeon could become physically absent, a "telepresence" that, however, can work simultaneously on multiple patients. A possible reduction in number of nurses that will do the work on site is also invoked. Again we encounter "the epitome of efficiency," understood purely in quantitative terms: reduction of costs and human resources. If complex chirurgical intervention is

not yet realizable this way, healing through telecare is not a fantasy. Sometimes it aims to enhance access to health care in deprived locations where developing haptic technologies for co-presence makes sense. However, we need also to ask what types of experiences of caring will be produced through these innovations? Which new managed "conducts" will pass as care? (Latimer 2000). Thinking from labors that become less visible and from the perspective of patients/users and, importantly, also that of "non users," Nelly Oudhsoorn shows how care at a distance challenges existing modes of interaction and transforms rather than reduces burdens of labor. Also, the replacing of face-to-face interaction places sections of the networks of health care out of touch for patients (Oudshoorn 2008a; 2008b). The materiality and directness of touch acquires added tones as other mediations are rendered irrelevant: What are more efficient doctors going to be in touch with? What kind of healing-touch is this? Is the reversibility of touch, its potential of consequential corelationality, of shared vulnerability, invalidated when patients cannot reach who is touching them?¹² One thing seems sure in a finite world, that these new forms of connection produce as much copresence as they increase absence. They do not really reduce distance; they redistribute it.

Pausing: Dilemmas of Speculative Thinking

Questions and skepticism about expanded possibility in promises of touch accumulate. Yet my aim is not to distance myself from these yearnings, neither to purify an "other" vision of touch—the "really" caring one. I am not interested in the elucidation of underlying social, political, and cultural reasons and causes for the lure of touch and the attractiveness of promises of technotouching. I could be discussing how this "turn" to touch may correspond to other declared theoretical turns: turns to materiality, to practices, to ontology, to radical empiricism. But while I am hesitating here about the promises of touch, I remain concerned about the pitfalls of theoretical critique discussed in the previous chapters. Blanketing the specificities of situations and cases under a general rationale that critiques the haptic promise, placing myself as observer at a distance from where I could understand what is at stake, would be falling into one of those pitfalls. Zooming out at theoretical speed, blending categories that mirror

each other into a feel of sameness to support the argument that *something is happening* in the turn to touch might be precisely what thinking with touch, thinking haptically, is not about: the specificity of textures disappears and "a" problem surreptitiously becomes everybody's problem.

My engagement with touch remains situated within an exploration of what caring signifies for thinking and knowing in more than human worlds. Here, a caring politics of speculative thinking could reclaim hapticity as a way to keep close to an engagement to respond to what a problem "requires." And of course, what we come to consider problematic is grounded in the collective commitments that shape our thinking and what we care for. And yet a speculative commitment grounded in the problems that we have set out to respond to seeks not to "simply reflect that which, a priori, we define as plausible" (Stengers 2004), or that which confirms a theory. In other words, engaged speculative responses are situated by what appears as a problem within specific commitments and inheritances, within contingencies and experiences in situation. If to care is to become susceptible of being affected by some matters rather than others, then situated responses are engaged in interdependent more-than-one modes of subjectivity and political consciousness. Therefore, in revaluations of touch, in reclamations of touch, not only do I read the kind of world-making that is being speculated upon through the partialities of my cares but I also think with other speculative possibilities.

That things could be different is the impulse of speculative thinking. In this book the speculative refers to a mode of thought committed to foster visions of other worlds possible, to paraphrase the motto of the alter-globalization movement, "another world is possible." Related to the sense of sight, the way of the speculative is traditionally associated with vision, observation. In feminist approaches, as I mentioned in the introduction, speculative thinking fuels hope and the desire for transformative action. It belongs to feminism visions' affective power to touch, to nurture hope about what the world could be, and to engage with its promises and threats (Haran 2001). This involves political imagination of the possible, purposes of making a difference with awareness and responsibility for consequences: speculative thinking as involved intervention—as speculative commitment.

But the notion of speculative vision also seems to suggest—as in the phrasing "pure speculation"—a flight transcending the material conditions that ground transformation in the present, from the plainness and mundaneness of the everyday that visionaries are habitually suspected of neglecting. The predicament of speculative thought somehow reenacts a worn-out fraught question for critical thought: How can thinking lead to material change? And paradoxically, it doesn't help that vision, as a metaphor for knowing, has traditionally conveyed the notion that true thought and knowledge is based on clear and unpolluted observation and reason, on a disembodied relation to a distinct world, the pride of modern science according to rationalist humanist philosophies. If the speculative is suspected of improbability, thought and action led by metaphors of clear vision have been criticized for a reductionist, bifurcated, form of relating, abstracted from the bodily engagement that makes knowing subjects relevant in interdependent worlds. What's more, opting for the speculative as the making of a difference, for diffraction rather than reflection of the same, for alternative investments in thinking the possible or the virtual, I also have to consider my belonging to a time and culture radically turned into investment into a future (of outputs and returns of investment) in ways that tend to drain present everyday conditions (an issue that I address in the last chapter of the book). In my world, the speculative is also the name of fairly intoxicating financialized bubbles out of touch with finite pasts, presents, and futures. These unsolved tensions are embedded in an attempt of thinking with care invested in speculative thinking of what could be but grounded in the mundane possible, in a hands-on doing connected with neglected everydayness.

Devising relevant and grounded interventions calls for speculative thinking that goes beyond descriptions and explanations of what is and of how things came to be. The worlds into which touch will attract us are not written in its technologies or in the purported nature of touch's singular phenomenology. The concrete differences made when reclaiming touch and reinventing touching technologies for everyday life are all but neutral; they will be marked by visions that touch us, and that we want others to be touched by, speculative visions of touch—touching visions. Where this consideration of the ambivalent promise of touch for thinking speculatively

with care has brought me is to questions such as: How can visionary diffractive efforts resist inflated virtual (future) possibility detached from (present) material finitudes? And can we resist the promises of immanent touch to transcend fraught mediations?

Touching Visions

My initial leaning for touch as a sensorial universe that expresses the ambivalences of caring emerged from its potential for responding to the abstract and disengaged distances more easily associated with knowledgeas-vision. But because touch short-circuits distance, it is also susceptible to convey other powerful expectations: immediacy as authentic connection to the real, including otherworldly realities for spiritual or mystic traditions, as well as claims not so much of transparent and unpolluted observation but of direct and extended accelerated efficient intervention. If touch could offer a sensorial, embodied grounding for the proximities of caring knowing, we also need touching visions more susceptible to foster accountability for the mediations, ambivalences, and eventual pitfalls of touch and its technologies. Connected bodily experience is not per se oriented to improve caring, nor does reducing distance necessarily trouble in predominant oppressive configurations. It is in this spirit that I return now to interventions that engage with touch to reclaim vision, by manifesting deep attention to materiality and embodiment in ways that rethink relationality, in ways that suggest a desire for tangible engagements with mundane transformation.

A grounded vision of transformation, rather than "enhancement," of experience through touch can be read in how Claudia Castañeda engages speculatively with the "future of touch," exploring specific touch-abilities in developments of "robotic skin" (Castañeda 2001). One of the stories she critically engages with is that of a "bush" robot constructed with a trillion tiny "leaves," each equipped with tactile sensors. This touchy leafy skin would, according to its conceiver's ambitious vision, see *better* than the human eye, for instance, by feeling a photograph or a movie through directly touching its material (227). Castañeda is interested in the "suggestiveness" of such a robotic formation for feminist theories of embodiment and relationality: "What would it be like to touch the visual in the

way this [robot] can?" Castañeda argues that when vision is "rematerialized" through direct contact, refusing the distinction between vision and touch troubles the ground of objectivity: "the distinction between distanced (objective) vision and the subjective, embodied contact" (229). Yet her vision of touching futures doesn't translate in a promise of overcoming (human) limitations. On the contrary, Castañeda reminds us that robotic touch is not limitless; it responds to the technological reproduction of specific understandings of how touch works.

In other projects Castañeda looks for alternatives, where robotic skin is rather conceived as a site of learning in interaction with the environment. One characteristic of these learning robots' interactive skin is that it first acts as protection: an alarm system that assists in learning to distinguish what is harmful and can destroy it (Castañeda 2001, 231). The requirement and outcome of ongoing technohaptic learning is not here mastery of dexterous manipulation but a skillful recognition of vulnerability. This suggests that, in contrast with dreams of directness, implementing touching technologies could foster awareness that learning (to) touch is a process. Developing skills is required for precise and careful touching, for learning how to touch, specifically. The experience of touch can then serve to insist on the specificity of contact. Castañeda draws from Merleau-Ponty to argue that the experience of touch "cannot be detached from its embodiment," but neither is it "reducible to the body itself." The skin, as an active living surface, "becomes a site of possibility" (232-34). In this vision, the generative character of touch is not given; it emerges from contact with a world, a process through which a body learns, evolves, and becomes. All but a dream of immediacy. The affirmation of specificity of contact and encounters is also not a limitation imposed on possibility. Specificity is what produces diversity: this is precisely how touch can have multiplying effects, extending the range of experiences rather than extending one mode of experience.

We can go further to affirm that touch is world-making, a thought that resonates with the relational ontology for which being *is* relating approached in the previous chapter. We can read Karen Barad's (2007) account of the seeing-touching made possible by "scanning tunnelling microscopes" in this direction. These devices are used to "observe" surfaces at atomic level,

a procedure that operates "on very different physical principles than visual sight" (53). This account calls upon the "physicality of touch." A sense of the object passes through a "microscope tip" and the "feel" of the surface passes through an electron current tunneled through the microscope. The data produced (including the resulting image of the surface) corresponds to "specific arrangements of atoms." In this encounter, where the physical universe is as much an agent in the *meeting* with a knower, there is no separateness between observing and touching, figuring well a vision that does not separate knowing from being-relating. Barad's account of the closeness of touch stands for a conception where "knowing does not come from standing at a distance and representing the world but rather from a direct material engagement with the world" (49, emphasis added).

This vision challenges the framing of knowing within epistemologies of representation and "optics of mediation" (Barad 2007, 374-77)—in social constructivism, for instance, "nature" never comes to "us" but is mediated by the knowledge social beings have of it. A critique of this bifurcated optic order requires a more subtle thinking of the "agency" involved in knowing yet without necessarily speaking for immediacy, for directness in touching the real, or nature. On the contrary, vision-as-touch works rather to increase a sense of the entanglement of multiple materialities, as in Barad's theory of the "intra-activity" of human and nonhuman matters in the scientific constitution of phenomena. Going further than interaction, Barad's intra-action problematizes not only subjectivity but also the attribution of agency merely to human subjects (of science)—as the ones having power to intervene and transform (construct) reality. The reversibility of touch (to touch is to be touched) also inspires the troubling of such assumptions: Who/what is object? Who/what is subject? It is not only the experimenter/observer/human agent who sees, touches, knows, intervenes, and manipulates the universe: there is intra-touching. In the example above, it is not only the microscope that touches a surface; this surface does something to the artifact of touching-vision. In other words, touching technologies are material and meaning producing embodied practices entangled with the very matter of relating-being. As such, they cannot be about touch and get, or about immediate access to more reality. Reality *is* a process of intra-active touch. Interdependency is intrarelational. As it undermines the grounds of the invulnerable, untouched position of the master subject-agent that appropriates inanimate worlds, this ontology carries ethical resonance. What we do in, to, a world can come back, reaffect someone somehow.

This is thinking touch as world-making. How we know in the world populates it with specific connections. People and things "are in mutually constituting active touch" that "rich naturecultural contact zones multiply with each tactile look" (Haraway 2007b, 6–7). Thought as a material embodied relation that holds worlds together, touch intensifies awareness about the transformative character of contact, including visual contact—tactile looks. Here the sense of intensified curiosity is figured by a particular way of seeing-touching, a haptic-optic figured by Eva Hayward's "fingeryeyes." Coined in speculative thinking with the sensorial impressions of encountering cup corals, this figuration speaks of a visual-haptic-sensorial apparatus of "tentacular visuality" as well as the "synaesthetic quality of materialized sensation" (Hayward 2010, 580). Hayward's sensuous writing compels us into the queerness of caressing encounters with cup corals but retains awareness of the predicaments of closeness to fragile nonhuman others:

The coralogical impressions of fingeryeyes that I have described cannot be agnostic about animal well-being because ontology is what is at stake. Cross-species sensations are always mediated by power that leaves impressions, which leaves bodies imprinted and furrowed with consequences. Animal bodies—the coral's and mine—carry forms of domination, communion, and activation into the folds of being. As we look for multispecies manifestations we must not ignore the repercussions that these unions have for all actors. In the effort to touch corals, to make sense of their biomechanics, I have also aided in the death of the corals I describe here; this species-sensing is not easily refused by the animals. (592)

What these visions that play with vision as touch and touch as vision invite to think is a world constantly done and undone through encounters that accentuate both the attraction of closeness as well as awareness of alterity. And so, marked by unexpectedness, they require a situated ethicality.

There is a particular form of multifaceted collective reciprocity at stake in the ability and responsibility to respond to being touched: a "responseability," in Haraway's terms. This requires curiosity about what happens in contact zones, asking question such as: "whom and what do I touch when I touch my dog?" with which Haraway opens her adventurous exploration of the layers of naturecultural relations that make interspecies touchings possible—including sophisticated and mundane technologies—while actively speculating on what could be possible through taking seriously these chains of touch. These are worlds of collective feeling, relational processes that are far from being always pleasant or livable but have something specific and situated to teach us. The question of how we learn to live with others, being in the world—to be touched as much as to actively touch, is an opening to "becoming with." Touch "ramifies and shapes accountability" (Haraway 2007b, 36), furthers a sense of inheriting "in the flesh," and invites us to be more aware about how living-as-relating engages both "pleasure and obligation" (7). In contrast with promises of touching technologies for network extension and human enhancement thinking about caring proximities, these situated touching visions can increase ethical awareness about material consequences. Here, knowing practices engage in adding relation to a world by involvement in touching and being touched by what we "observe." Thinking with these visions, I seek a sense of touch that doesn't evoke a hold on reality with improved grasp that intensifies proximity with gradualness and care, attention to detail in encounters, reciprocal exposure, and vulnerability, rather than speeded efficacy of appropriation.14

A beautiful example of a nuanced reclamation of touch, paradoxically within a reaffirmation of vision, is how, in her analysis of close-up images, taken at an almost touching closeness, media theorist Laura U. Marks describes the blurred figures produced by intimate detailed images of tiny things, inviting the viewer into "a small caressing gaze" on pores and textures at the surface (Marks 2002, xi). She argues that the power of a *haptic* image is not the identification of/with a distinct "figure" but to engage viewer and image in an immersed "bodily relationship." Yet wanting to "warm up" rather than negate optic culture, Marks doesn't aim to abolish distance but rather to keep an "erotic oscillation" in which the desire of

banishing distances is in tension with the letting go of the other, not driven by possessiveness (13–15). Significantly, she says that the closeness of haptic visuality induces us to acknowledge the "unknowability of the other." When vision is blurred in close imagery, objects become "too close to be seen properly," "optical resources fail to see," and optic knowing is "frustrated." It is then that the impulse of haptic visuality is stirred up, inviting us to "haptic speculation" (16). We learn that to speculate is also to admit that we do not really know wholly. Though there are indeed many things that knowledge-as-distant vision fails to feel, if touch augments proximity, it also can disrupt and challenge the idealization of longings for closeness and, more specifically, of superior knowledge in proximity.

Haptic speculation doesn't guarantee material certainty; touching is not a promise of enhanced contact with "reality" but rather an invitation to participate in its ongoing redoing and to be redone in the process. Dimitris Papadopoulos, Niamh Stephenson, and Vassilis Tsianos (2008b, 143) conceive a haptic approach to engage with transformative possibilities in everyday forms of sociability that are neglected by optic representation. They encourage haptic experiencing as an attempt to change our perception, to "hone" it to perceive the "imperceptible politics" in everyday practices in which another world is *here*, in the making, before "events" become visible to representation. In these they see a chance, not only for subversion but for creating alternative knowledges. Haptic (political) experience is for them a craft of *carving* possibility in the midst of potential incommensurability. Unknowability takes here yet another meaning.¹⁵ Haptic speculation is not about imaginative expectation of events to come; it is the everyday (survival) strategy rooted in the present of "life below the radars" of optic orders that do not welcome, know, or not even perceive the practices that exceed preexistent representations and meanings. It is not difficult to see why this way of being-knowing with a world can be attuned to the sensibilities of thinking with care, to honing perception to matters of care. Focusing on everydayness, on the uneventful, is a way of noticing care's ordinary doings, the domestic unimpressive ways in which we get through the day, without which no event would be possible. While events are those breaks that make a difference, marking a before and after that gets recorded in history, care, in spite of all the work of political reclaiming, in spite of its hegemonic marketization, remains associated with the unexciting, blended with the dullness of the everyday, with an uneventful temporality. Haptic engagement is akin to thinking with care as a (knowledge) politics of inhabiting the potentials of neglected perception, of speculative commitments that are about relating with, and partaking in, worlds struggling to make their other visions not so much *visible* but possible. These engagements do not so much entail that knowing will be enhanced, more given, or immediate through touch than through seeing; rather, they call attention to the dimension of knowing, which is not about elucidating, but about affecting, touching and being touched, for better or for worse. About involved knowing, knowledge that cares.

Coda: Sensory Values

Kira laid a slim hand on the bulkhead, on the square plate that was the only access to Helva's titanium shell within the column. It was a gesture of apology and entreaty, simple and swift. Had Helva been aware of *sensory values* it would have been the lightest of pressures. (McCaffrey 1991, 35, emphasis added)

Kira is a human traveling through space in Helva, a female-gendered spaceship with a human brain, the central character of Anne McCaffrey's sciencefiction classic, The Ship Who Sang. These two beings are starting their first conjoint mission and learning to know each other. Both are touchy, in intense pain due to the loss of loved ones (a husband in Kira's case, the previous human ship skipper in Helva's). The excerpt above comes from a scene where Helva, the ship, is physically touched by Kira after a moment of tense argument between them. Helva has no skin sensitive to "sensory values"; however, she indeed *feels* something, beyond her titanium shell body, just by seeing Kira's touching gesture. Helva cannot touch Kira back; her power to act through physical touch is limited. She touches Kira through careful word communication, and by readjusting functions in order to create a caring environment for her in her body-spaceship. Kira knows that Helva's titanium shell cannot "feel" her touch and still her gesture of apology expresses the "lightest of pressures," which Anne McCaffrey qualifies as a "sensory value."

Throughout this chapter I have used "vision," instead of sight, to refer to visual sensorial universes and to speculative ethico-political imagination. Lacking a word that makes of touch what vision makes of sight, I have used touching visions as a surrogate. The promise of touching visions is not just given by the haptic's particular phenomenology. Following the lure of the haptic, I ended up looking for visions that could engage touch with care, that is, that do not idealize it. Without proposing these to become normative orientations, I wonder what it could mean to foster something like "sensory values" for the power of touch, for our touching technologies? I'm thinking of values as collective ventures embodied and embedded in prosaic material everyday agencies, contingently becoming vital to situated relationalities that ground them in a living web of care; of values not necessarily as that which should define the good but as interrogative demands emerging from relations. Sensory values are not qualities reserved to touch, but thinking with touch emphasizes them well because of the intensification of closeness that the haptic signifies and enacts. Touching technologies do not need to celebrate the inherent significance of touch but rather touching visions that also account for haptic asperities. Values for touching visions call for an ethical engagement with the possibility of care as a relation that short-circuits (critical) distance and that is about immersed, impure, ethical involvement, but remain in tension with both moral orderings—such as managerial orientations toward efficiency and speed—and idealized longings for immanent relations.

A sensory value in Kira and Helva's interaction inspired by the trope of touch could be named "tactfulness," the same word for the sense of touch in some languages—for example, in Spanish, *tacto*. A form of sensorial politeness, understood as a political art of gauging distance and proximity. An ethical and political learning that might well be vital in caring for worlds in the making through intensified, constant touch between entities human and more than human—a daily practice of "articulating bodies to other bodies with care so that significant others can flourish" (Haraway 2007b, 92). Thinking touch with care beautifully emphasizes intra-active reversibility, and therefore vulnerability in relational ontologies. If touch is an experience where boundaries of self and other tend to blur, it also speaks of intrusiveness and appropriation: it *is* possible to touch without

being touched. Appropriation abolishes significance. Thought through a politics of care, "intra-active" touch demands attentiveness to the response, or reaction, of the touched. It demands to question when and how we shall avoid touch, to remain open for our haptic speculations to be cut short by the resistance of an "other," to be frustrated by the encounter of another way of touching/knowing. A sense of careful "reciprocity" could therefore be another value for thinking with touch's remarkable quality of reversibility.

Thinking sensory values of care with the universe of touch is a speculative displacement of ethical questioning. Reciprocity is an interesting notion to expose this. Thinking the webs of care through sensorial materiality, as chains of touch that link and remake worlds, troubles not only longings for closeness but also the reduction of relations of reciprocity to logics of exchange between individuals. Sensory values such as intra-touching politeness and haptic reciprocity refer to an obligation to reciprocate attentiveness to others, but one that is quite different from that of a moral contract or the enactment of norms—a quality of caring obligations that I discuss in the next chapter. Thinking care through the haptic and the haptic through care brings up one of the most appealing aspects of care for a speculative ethics in more than human worlds: that its "value" is inseparable from the implication of the carer in a doing that affects her. Care *obliges* in ways embedded in everyday doings and agencies; it obliges because it is inherent to relations of interdependency.

Affirming care as an inherently material obligation is a fraught terrain, given what this means for caregivers, that caring is often a trap, a reason why, as Carol Gould has argued, reducing political obligation to consent or choice is an extremely gendered ideal that excludes a whole set of relations from the political sphere where choice and consent between autonomous individuals has little meaning (Gould 1988). Here I am obviously arguing for a distributed notion of the material obligation of care—not as something that only some should be forced to fulfill.¹⁷ Thinking reciprocity through a collective web of obligations, rather than individual commitments, exposes the multilateral circulation of agencies of care.¹⁸ As David Schmidtz argues, the common idea of "symmetrical" reciprocity doesn't exhaust the ways people try to "pass on" a good received (Schmidtz 2006, 82–83). Care troubles reciprocity in this way because the living web of care

is not one where every giving involves taking, nor every taking will involve giving. The care that touches me today and sustains me might never be given back (by me or others) to those who generated it, who might not even need or want my care. In turn, the care I will give will touch beings who never will give me (back) this care. Reasons to support this vision are advanced by work that sees the ethical implications of care challenging an ethics based on "justice" (Gilligan 1982). And why others ask for the reciprocity of care to be collectively distributed (Kittay 1999), contest the reciprocity model of economic exchange, support "unconditional welfare" (Segall 2005) for example, the State would provide means for care (through unconditional basic income) that could ensure that those with care responsibilities, but who might not have somebody caring for them, are not depleted or neglected. And so by being cared for, they also continue to be able to care for others. Whether we agree or not that the state, given its major role in the structural reproduction of inequalities, is the appropriate collective to foster an ethics inherent to communally reciprocal relations, the essential notion here is that reciprocity in as well as possible care circulates multilaterally, collectively: it is shared. Iris Marion Young adds another problematic dimension to these relations when she argues that reciprocity cannot be thought as symmetrical because this masks the asymmetrical positions in which people are situated and the possibility of a different ethics: "opening up to the other person is always a gift; the trust to communicate cannot await the other person's promise to reciprocate" (Young 1997, 352). I propose to think of relations of care giving and receiving in a similar way not so much because care is a gift but because there is no guarantee that care will be reciprocated; it happens asymmetrically both in terms of power and because people who care, caregivers, cannot give with the expectation for it to be symmetrically reciprocated. The care that has been "passed on"-as is neglect-continues to circulate, not necessarily morally or intentionally, in an embodied way, or simply embedded in the world, environments, infrastructures that have been marked by that care. The passing on of "care" does not need to be determined by the care we have received to be tangible. What these multilateral reciprocities of care disrupt are conceptions of the ethical as a moral compound of obligations and responsibilities presiding over the agency of intentional (human) moral subjects.

In the following chapters, we will see how these questions have brought this journey closer to attempts to think differently about the circulation of ethicality in more than human worlds—close to those who contest the reduction of ethicality to human intentionality (Barad 2007) and to those who engage with the intentionality of the other than human, seeking to think of "nature in the active voice" (Plumwood 2001). These are paths for questioning human-centered notions of agency that do not necessarily converge, but they are both compelling and challenging to thinking with care in more than human worlds. Interrogating the intra-active but nonbilateral reciprocity of touching with care for the touched, thinking touch through care and as sensory values, invites us to distribute and transfer ethicality through multilateral asymmetrical agencies that don't follow unidirectional patterns of individual intentionality. Caring, or not caring, however, are ethico-political problems and agencies that we mostly think as they pass from humans toward others. But thinking care with things and objects exposes that the thick relational complexity of the intratouching circulation of care might be even more intense when we take into account that our worlds are more than human: the agencies at stake multiply. How to care becomes a particularly poignant question in times when other than humans seem to be utterly appropriated in the networks of (some) Anthropos. What does it mean to think how, in the web of care, other than humans constantly "reciprocate"? Can we, at least speculatively, include such thoughts in an ethical inquiry modestly reaching out with care from the uneasy inheritances of human antiecological situatedness? Following such intimations, Part II of this book attempts to think care as a generalized condition that circulates through the stuff and substance of the world, as agencies without which nothing that has any relation to humans would live well, whether all that is alive is engaged in giving or care, whether care is intentionally ethical.