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Abject Ontologies: Cancer and 'Living On'

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Abstract
This paper examines cancer through the lens of abjection. While cancer can be understood as an abject lifeform, we explore what we name the *abject ontologies* created through both cancer detection technologies/practices and cancer treatment, specifically the drug combination Adriamycin and Cytoxan. We ask: what are the abject ontologies produced through *living with* and *living on* from cancer diagnosis and treatment? Our concern is to map how cancer *undoes* our supposedly stable categories inherited from modernist logic, challenges our very ideas of what it means to be human, and demands an ethical reorientation of public cancer discourse.

Keywords Cancer · abjection · ontology · corporeality · biomedicine

In October 2009, monstrous pink blobs invaded the streets of Auckland, New Zealand. Part of the global public awareness campaign of 'Breast Cancer Action Month,' bulbous veiny street-art tumors were installed in commercial areas—moving, undulating, and metastasizing through the city streets. Drawing on B-movie horror conventions, namely the iconic amorphous ball of gelatinous pink goo that first made its appearance on the silver screen in 1958 battling against Steve McQueen in his debut leading role, 'the blob' returns as the monstrous threat of breast cancer, oozing around town, squeezing through the cracks, and overtaking unsuspecting people, and growing horrifically with every symbolic victim of the disease.

The onslaught of this disembodied breast-cancer blob was not introduced to earth by a crashed meteorite or covert government experiment but by the New Zealand Breast Cancer Foundation and designer Colenso BBDO. Rampaging through the city, engulfing space, blocking sidewalks, and terrifying bystanders with giant veins and its seemingly gelatinous mass, the wobbling, unpleasantly-fleshy-looking blob signifies breast cancer's slow but persistent encroachment on everyday life, metastasizing even inside the family and home. To mark this possibility, the blob simultaneously debuted in a television commercial depicting the lives of a 'normal' New Zealand family; the 'elephant in the room,' the blob grows and fills every nook and cranny of the house, displacing

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the family, obstructing all communications and relations, breaching all boundaries and refusing to be contained. Again, the message: cancer, left untreated, leads to problems of monstrous proportions—the gooey-pink dissolving of all life by the 'return of the repressed' disembodied cancer-tumor monster.

The characterization or negative ascription of cancer as monster is indisputably jarring. Yet, cancer is often represented this way—evidenced clearly by the blob or the fact that historically cancer was viewed as a "demonic pregnancy" (Sontag 1989, 14).[1] Typically defined in terms of bodily malformations and/or the lack of clear bodily limits and boundaries, monsters (and of course, freaks) provide science and society more broadly with modernity's 'others'—the foil or constitutive outside against which to define health, human normativity, and corporeal and ontological order (Grosz 1996).[2] The monstrous can take the form of a displacement/lack of organs, a defective or excessive growth of the body, or an over-exuberant deviation from bodily norms and forms. Importantly, the history of the study of cancer has been subsumed under the study of abnormal formations—teratology—a term also used to describe the mythology relating to monsters, highlighting a productive etymological slippage.

But how are we to make sense of this idea of cancer as monstrosity? On the one hand, this representation speaks to Margrit Shildrick's claim that "[w]here normative embodiment has hitherto seemed to guarantee individual autonomous selfhood, what is monstrous . . . disrupts the notions of separation and distinction that underlie such claims" (2002, 2). Cancer clearly defies normative embodiment, *troubling* the very grounds on which individual autonomy and notions of corporeal sovereignty rely. On the other hand, Natali Cavanagh describes how cancer's disruptions become objectified and understood as an outside 'thing-like' threat to the body:

> We would like to imagine cancer as a physical monster because we can fight physical monsters. If we give cancer a face and a sword, then it is possible to imagine that by doing something (battling the monster) we can change our current situation. We monstrify cancer because, by doing so, it defines our agency and confirms our humanity (our desire to fight and find the will to live). (2017, 1)

Here, Cavanagh points to the notion that monstrifying cancer helps contain its threat—precisely because it is transmogrified into a *being* that we might vanquish, and so *recover* our sense of sovereignty.

In what follows, we suggest that cancer's characterization as monster can be productively understood through the lens of abjection. We examine how the concept of abjection can help us think through the 'thingness' of cancer, as it appears in biomedical constructions of the very biology of the disease: where cancer can be positioned as an abject lifeform. We then pivot to consider what we name the *abject ontologies* created through both cancer detection technologies/practices and cancer treatment. In relation to cancer treatment, we examine ontologies of abjection inaugurated through chemotherapy, specifically the drug combination Adriamycin and Cytoxan. We ask: what are the abject ontologies produced through *living with* and *living on* from cancer diagnosis and treatment?[3] To explore these ideas, we engage our own previous ethnographies and auto-ethnographies of cancer (Krupar 2012; Ehlers 2012, 2014, 2016) and a range of feminist accounts of cancer—affective histories or autopathographies—namely those by Jackie Stacey (1997), Susan Gubar (2011), Catherine Lord (2004), and Eve Kosofsky Sedgwick (1999). Our concern is to map points of similarity across these diverse accounts in order to show how cancer *undoes* our supposedly stable categories inherited from modernist logic, challenges our very ideas of what it means to be human, and demands a critical politics attentive to living with and dying from cancer.

Enter abject(ion)

Calling on the work of Julia Kristeva, the abject refers to a state or place "where meaning collapses" (1982, 2), particularly modernist meaning-making that strictly delineates self/other, subject/object, inside/outside, and life/death.[4] As Kristeva writes: "It is . . . not lack of cleanliness or health that causes abjection [an affective response to the abject] but what disturbs identity, systems, order. What does not respect borders, positions, rules. The in-between, the ambiguous, the composite" (4). The abject is that which calls into question the boundaries of these states and the parameters of what Kristeva calls the "clean and proper" body/self, because it breaches or exceeds these boundaries and, in so doing, threatens the fantasy of bodily integrity and self-control (71).[5] Again, this fantasy is attributable to modernist logic that figures the self as defined against the other and as having a body it controls and defends—a body that is ideally bounded and invulnerable (Ehlers 2014; Shildrick 2002).

Cancer is cast as abject—an abject lifeform—in several key senses. First, in biomedical terms, it represents an excess life of cells 'gone rogue.' Cancer is a form of excessive vitalism, where cells proliferate too much—too well—into an excess of life that portends death (Cooper 2008; Ehlers 2015). As such, it *transgresses the boundaries of life/death* by heralding death with what are usually the first signs of life—cell growth. Indeed, for Kristeva, the utmost abjection is to be found in "death infecting life" (1982, 4).[6] Second, and again evidenced through biomedical understandings of the disease, cancer *defies the boundaries of form and limit* as it is comprised of unbounded cells that replicate until they outnumber healthy differentiated cells. Cancer models new cell division—the very growth and division essential for life—but only develops from what are known as 'undifferentiated cells' that do not "respect territorial boundaries" and, indeed, often breach these boundaries by generating growth in other organs (Varmus and Weinberg cited in Stacey 1997, 80). These undifferentiated cells replicate until they outnumber healthy cells because the body *fails to recognize them as other.* Third, cancer *troubles clearly defined inside/outside boundaries of the body*: cancer is a threat from within. Moreover, if the abject references ambiguous materials, composites, leaky substances, and other threats—all that must be expunged in order to restore order and security—then, with cancer, the abject is the contaminating potential/presence of an individual's own materiality. Put another way, cancer can be experienced as the 'other' within, thus displacing the self/other binary: it is *of* the body as much as it is an internal outsider. As such, cancer imperils the concept of an individual sovereign self and notions of bodily integrity.

But cancer is also a threat to the *social body*. Bodies that are considered out of control—such as the body with cancer—may, as Shildrick (2002, 73) argues, carry no infectious properties and yet be treated as contaminating and/or contagious. 'Contagion' is a familiar term in biomedical discourse: at the macro level, public health relies on epidemiological measures designed to control—avoid—threats that expose bodily vulnerability and induce bodily degeneration. Public health campaigns and directives seek to mitigate potentially rising cancer rates in the population/social body by exhorting individuals to assume responsibility for their well-being—principally through risk abatement and preemptive detection.[7]

Scaling back to the individual body, the abject lifeform of cancer ultimately threatens the biomedical pursuit of stasis, closure, and bodily autonomy. Within this model, the body is viewed mechanistically, and the normative body is one that is absent of disease and 'whole'—where *wholeness* denotes the idea of a closed, complete, invulnerable body

that functions in accordance with normative conventions of 'controlled embodiment.' This body is understood as singular, unitary, defensible, and complete with all anatomical parts in their 'proper' places, and it is marked by a sense of bodily consonance or a seamlessness of bodily experience.[8] It is precisely because cancer violates biological (and normative) boundaries that biomedicine seeks to control it—ostensibly to restore normative order. However, these very efforts to control the body through mitigating the threat of cancer *paradoxically open the body/self to further abjection*. They inaugurate, or indeed produce, what we call *abject ontologies*.

Abject ontologies are those abject—in-between, ambiguous, composite—states or modes of being that are viewed, experienced, and lived in breach or excess of what is considered normative modes of being. Abject ontologies are *dynamic*: they change and shift according to biomedical protocol and disease state/status—thus contesting the possibility of ontological singularity. Importantly, these abject states of being do not exist at the cellular or genetic scale but are instead produced through the social realm: that is, biomedical intervention. Moving away from ontologizing cancer, then, in what follows we emphasize how cancer-detection efforts and treatment *bring into being* particular abject *social* ontologies.

Abject ontologies of investigation/detection: surveillance and the disease continuum

If cancer is viewed as an abject lifeform produced through cellular malfunctioning, a range of technologies are used to detect this possible threat. On the one hand, then, we see that the abject is demarcated as a 'thing' (an abject lifeform) that must be located and hopefully neutralized. On the other hand, however, we see that while cancer's abject status is considered *of* the body, technologies are never absent from the construction of bodies or the abject itself. Indeed, if the abject is that which disrupts normative embodiment, various forms of abjection are *produced in/through these very technologies of detection* (Krupar 2012). In this part of our analysis, we take breast cancer as a specific example to demonstrate that the technological means of detecting cancer both militarizes the body's boundaries *and* induces abject ontologies.

Through the logics and economy of detection, the body itself is perceived as threat: there is always-possible abject potential residing in the body, in that cells can become cancerous. Genetic testing and other breast cancer detection technologies, such as mammography, biopsy, and MRI, seek to mitigate this threat. More than this, however, the teleology of detection is risk abatement: to deliver a negative diagnosis and thus relieve the potential fragility of the body (even if only temporarily) and thus restore notions of bodily seamlessness.

The fragility of the body—at risk of developing breast cancer—is first addressed through screening practices and early detection at the level of the population, producing women as diagnostic subjects. All women are viewed as risky subjects on the breast cancer continuum, meaning all women, no matter how 'healthy' or 'normal,' are at risk and, therefore, are called on to undergo screening. But as Maren Klawiter crucially notes, there is no either/or of breast cancer in surveillance; there is a "disease continuum that draws potentially all women into breast cancer subjectivity, dispelling any clear position or claim of 'normal'" (2008, xxviii). Relentless surveillance makes the (always abject) potential of cancer immanent, inducing women to preempt the realization of this risk. For example, breast cancer detection increasingly incites women to enlist genetic testing for the BRCA1 and BRCA2 breast cancer genes as part of their

knowledge-economy of self. When individuals carry a mutated form of either, they have a significantly increased risk of developing breast or ovarian cancer at some point in their life, and children of parents with the mutations have a 50% chance of inheriting the gene mutation.[9] Although the accuracy and meaning of the test results are highly contested—and in spite of the fact that the test is expensive and was under the control of one company (until the U.S. Supreme Court overturned patent rights on genes in 2013)—many women elect to get the test, which can lead to prophylactic mastectomies to preempt the development of cancer. In such instances, the *potential* abject-threat is often read as *inevitable*.[10] The geneticization of risk has further implications for the disciplining of children's bodies—where the breast buds of children that test positive for BRCA1 and BRCA2 could be removed—and where genetic testing in IVF selection could be done according to the risk for this disease.[11]

This is not to say that early detection of breast cancer should be ruled out or discouraged. What we are interested in here are the ways susceptibility to breast cancer has become an emergent form of life, which continually calls on the subject to embody the threat of potential cancer *and* to subject themselves to what can be thought of as abject interfaces with detection technologies. These interfaces highlight that the abject is not some-thing *of* the body but is *a procession or series of actions or changes undergone and experienced* at the level of the body. Diagnostic biopsies, for example, can be injurious (producing tissue damage from the biopsy, vein collapse from injected testing contrasts, residual pain), and those injuries often then serve as the justification for the need for further detection. Surveillance of breast cancer can also generate abject undoings of the patient's body through grotesque body-machine interfaces. And screening technologies manipulate the body in all kinds of ways, in some cases making the body an appendage of the machine. For instance, the mammogram—which involves the awkward hugging of a giant, hard plastic-encased machine that squishes an individual breast between two flat presses—has been satirized as a boob sandwich press, a juicer, a laundry press. The MRI machinic interface requires one to abjectly lie face-down, with breasts dangling—bovine-like—into a plastic bin; the whole body is then inserted into the large magnetic resonance 'tube' for an extended period. The other humans involved in orchestrating this surveillance technology are externalized in a separate control room, as the patient receives a mechanized shot of contrast into their veins to aid the imaging process. The breast biopsy dismantles the patient, one slice at a time; the inserted needle extracts a core sample, a sliver, claiming a now alien piece and leaving fat cells to aggravate over the hole left in the flesh. Damaging encounters with detection technologies can alter the bodily terrain and mark it permanently, with scar tissue and cell death, or what is called 'fateus necrosis.'

Detection technologies unsettle understandings of the individual, human, and familiar body; taken-for-granted distinctions between machine and human, even animal and human, are up for grabs. While such detection injuries are by no means comparable to the level of harm and toxicity caused by treatments for cancer, a cost-benefit ontology is rehearsed that justifies injurious practices as a lesser evil than cancer; such injuries are disavowed and/or accounted for through future thinking and the very affirmation of life that underscores our vital politics.[12]

Abject ontologies of treatment: the red devil regime

To this point, we have suggested that while cancer is often cast as abject (supposedly immanent to the body), responses to the threat of cancer actually inaugurate or open the subject to abject encounters and changes that are experienced at the level of the body,

producing particular abject ontologies. Rather than ontologizing cancer then, it is more analytically salient to explore what these processes *do* to people.

The abject ontologies produced in relation to cancer are perhaps more tangible when cancer is detected. In this moment, the always-possibly-latent threat is realized, and the body's purported seamlessness ruptured.[13] While a range of technologies are used in the treatment of cancer, we turn here to a consideration of chemotherapy which, it would seem, functions to recuperate both the supposed clean and proper body and the range of binary oppositions through which we understand subjectivity and life. At the same time, however, cancer-chemotherapy represents a certain paradox: it is premised on the imperative to 'cast out' the abject (cancer), but in order to do so, it requires that the subject undergo a process of abjection in order to live. For Elizabeth Grosz, abjection can be understood as "the subject's reaction to the failure of the subject/object opposition to express adequately the subject's corporeality and tenuous bodily boundaries" (1989, 70). For Karen O'Connell, it is "a horror at the body's vulnerability to a blurring of self" (2005, 218). While this abjection takes place at the level of the body, it also takes place discursively, in that the body is viewed as out of control—its purported inviolability and autonomy compromised—and thus in need of mastery through biomedical intervention technologies. These technologies promise a return to the body/self, as proper and bounded, but only through making the body/self *more* abject. The abjection caused by chemotherapy is ostensibly deemed *necessary* then, within dominant Western biomedical logic, because it is seen as *the state from which the continued potential for selfhood (and indeed life) proceeds.*

We see this abjection clearly in Catherine Lord's autopathography of cancer diagnosis and treatment, titled *The Summer of Her Baldness*, where she describes chemotherapy as equivalent to "mainlining weed killer." She says, "to invoke the perversely feminized metaphor oncologists prefer, [this is what] my particular 'recipe' sounds like. Adriamycin and Cytoxan: they fit right in on the pesticide shelf" (Lord 2004, 48). According to Lord:

> Chemo is medieval, enough poison to make you crazy miserable but not enough to put you out of your misery . . . Lights are too bright, noises are too loud, your skin is not only too tight but much too thin, every pressure point in your body hurts, and so does your entire skull. The soles of your feet burn, everything going into your mouth, even the water you must drink because you are desperately thirsty and because if you don't the drugs will sit in your bladder and corrode it from the inside out, everything feels like a bad idea. (ibid)

Adriamycin and Cytoxan (or AC), the drug cocktail to which Lord refers, is commonly used as a cancer therapy for some leukemia's, Hodgkin's Lymphoma, and cancers of the bladder, the breast, stomach, lungs, ovaries, thyroid, and soft tissue sarcoma among others. Originating from the unanticipated effects of chemical warfare used in World War II, chemotherapy is, needless to say, extremely toxic. And Adriamycin, one part of the AC chemo regime, is perhaps one of the most extreme forms of chemotherapy. Because the drug is so caustic—causing severe burns if it touches the skin or underlying tissue—it must be administered by a person in full protective clothing and mainlined straight into the bloodstream, and the person receiving the drug must take precautions against coming into contact with their own body fluids (and exposing others to these fluids) for seven days after treatment. Based on this extreme toxicity, along with its unforgiving side effects and bright red color, Adriamycin is colloquially referred to as 'the red devil' or 'the red death.' Adriamycin falls under the category of anthracycline chemotherapy: it works by interlacing with the DNA to wreak havoc in a cells' genetic material and reduces the replication potential by killing cells that divide rapidly, one of the main properties of most cancer cells. It is

generally administered every three weeks, for between four to six cycles, and is a cumulative 'attack' on the cancer with wide-ranging collateral damage.[14]

In the first and most obvious sense, abjection from the red devil registers through the side effects of this drug regime, effects that result, in Susan Gubar's words, in the body being "multiply unmade" (2011, 658). Other scholars writing about their own experiences of chemotherapy echo this sentiment, describing how this unmaking of the body occurs through the violation—or collapsing—of the boundaries of the body/self and through rendering the body monstrously alien.[15] It produces what Jackie Stacey refers to as a now "unfamiliar body . . . [that] . . . refuses the usual behaviours . . . and has lost its form and integrity" (1997, 85). This unmaking of the body begins at the moment the red devil is administered—when the red toxin is introduced into the vein.[16] As the drug enters the bloodstream it immediately begins to kill all rapidly dividing cells. Killing the cells in the mouth, the drug can cause mouth sores and oral thrush and lead to a perpetual metallic taste; killing the cells in the extremities, it can cause the nails of both the feet and the hands to become pigmented, brittle and potentially lift off the nail bed; and killing the cells in hair follicles inevitably causes all the hair on the body—from head to toe—to fall out approximately two to four weeks after the first infusion. In an attempt to mitigate these effects, the fire of the red devil is counteracted by the therapeutic use of ice during the administration of the drug: this shrinks the capillaries, making it harder for the drugs to reach those particular cells. So, for example, patients are encouraged to suck on ice or popsicles to minimize the chances of damage to the mouth, there is the possibility of wearing what is called a 'cold-cap' in order to stave off alopecia, and in some extreme cases patients can apply wine coolers filled with ice to their hands and feet in an attempt to prevent damage to those extremities.

The side effects of Adriamycin continue in what Gubar calls a "toxic tide" (2011, 658). Patients might experience peripheral neuropathy, which is when the nerves of the peripheral nervous system are damaged. Common symptoms associated with this damage are muscle weakness, cramps, and spasms, and loss of balance and coordination may also occur. Damage to the sensory nerves can produce tingling, numbness, and pain which is described in various ways such as: the sensation of wearing an invisible 'glove' or 'sock,' burning, freezing, or electric-like, extreme sensitivity to touch. Adriamycin also causes low white blood counts (leading to the increased susceptibility to infection) and low red blood counts (leading to anemia and an inhibited ability to clot). Together, these effects render the previously 'known' body—the prior corporeal ontology—unrecognizable and evacuate the fantasy of corporeal mastery. As Barbara Ehrenreich laments, "the dumb old body is . . . transmogrified into an evil clown" (2001, 44).

An additional way that the body/self is rendered abject through this form of treatment occurs because the side effects of Adriamycin result in the inability to regulate the thresholds between the body and its exterior and, thus, confound the boundaries *separating inside and outside the body*. The lack of nasal hair, for instance, leads to a constantly dripping nose; the lack of eyebrows or lashes results in sweat effortlessly dripping into the eyes; and the hypersensitive skin encounters the world raw and unprotected by the ambassador of hair. Moreover, the stomach is turned inside out with the lining destroyed, resulting in endless nausea; the steroids used to quell the constant nausea lead to a voracious and insatiable appetite for food that will only be regurgitated; and these steroids, in turn, lead to bouts of constipation. Stacey has described this process as "[t]he body's flows . . . [being] set in reverse: where food should enter, vomit exits; where waste should exit, suppositories enter" (1997, 84). For her, cancer and its treatment represent the abject "horror of undifferentiation."

This undifferentiation is further realized by a number of writers who describe chemotherapy as *producing a genderlessness* and/or a *troubling of the separation between adult and child*. Adriamycin chemotherapy effects how gender registers because it removes many of the corporeal markers that we use to construct and identify gendered subjectivity, such as facial and body hair and, instead, the body appears oddly alien-or-infant-like. This infant/alien-like body—further rendered like a child through its inability to control bodily functions—paradoxically prefigures an aged body. As such, the body and "time has nothing to tell" (Stacey 1997, 84).

In these various ways, cancer and its treatment through AC chemotherapy presents the impossibility of the ideal closure and invulnerability of the self's clean and proper body. It compromises and, indeed, collapses the oppositions of me/not me, self/other, inside/outside, male/female, adult/child. In addition to these permutations, however, cancer and chemotherapy also *displace and ultimately refuse the life/death dyad* and, in so doing, remake our understandings of life itself. Cancer confounds the idea that life and death exist as oppositional states, as noted earlier, in that "the first signs of life [cell growth] are indistinguishable from the first signs of death [the growth of cancer]" (Stacey 1997, 79). As such, cancer "promises death by the means of life" (80). And chemotherapy further troubles the supposed life/death binary by promising life by means of death: chemotherapy "destroys in order to preserve [and] [t]he body is poisoned with the hope of recovery" (85). This, then, is a killing in order to live.

These imbrications of life and death are further realized through what Gubar refers to as "the oddity of experiencing oneself as a chemical receptacle" (2011, 661). In her words, "accumulative chemotherapy can spawn malaise, confusion, loss of appetite, failure of mental focus, an excruciating sense of joyless paralysis or worthlessness, memory loss, exhaustion, and insomnia." This experience sees the body becoming more unfamiliar as toxins build up and, she states, "the chemicals drop . . . [her] down to a barely sentient level of existence" (661). Many have described this state as one of corporeal engulfment, where the extremity of the physical (and subsequent psychological) side-effects take over what was previously known as life. In this state, death folds *into* life: as Gubar remarks, "the living can reckon themselves dead" or, one experiences "a dying without death; a living without life."

"Living on"

The assumption here would be that chemotherapy is justifiable based on its aim and potential to extend life and to return the subject to their 'prior' (and supposedly bounded) body/self. This logic is problematic, however. A study by a team of Australian medical oncologists analyzed all randomized clinical trials reporting a five-year survival benefit attributable solely to cytotoxic chemotherapy in twenty-two major adult malignancies (Morgan, Ward and Barton 2004).[17] Their findings were that chemotherapy has improved survival by less than 3% in adults with cancer. This is not to say that less than 3% of cancer patients survived but, rather, that chemotherapy contributes less than 3% to that survival. Added to this, a study done by the UK's National Confidential Enquiry into Patient Outcome and Deaths found that rather than prolonging life, one in four (25%) of the deaths in their study was either caused or hastened by chemotherapy.[18]

Despite these statistics, chemotherapy—and the use of the red devil in particular—remains the gold standard of care in cancer treatment, and the biomedical legacy of such treatment must be borne out by those who undergo it. Bearing this legacy represents what

Rei Terada, following Derrida, terms "living on." To *live on* is to experience a "quasi-existence [that] overflows classical ontology. . . [It is to occupy] a realm where representation can no longer keep account of the difference between continuance and vanishing, positing an ambiguity within ordinary life" (2001, 132). So, in this concluding section of the paper we briefly consider what 'living on' following chemotherapy might mean and what mechanisms or forms of survival it might entail. Such survival cannot be understood through binarisms—of me/not me, life/death, self/other—but through strategies developed to *negotiate the impossibility* of these bifurcations.

There are many complex ways that people live on following chemo, and our coverage here is limited. However, we want to tease out two main forms that are highlighted in a passage written by Catherine Lord, where she states:

> You . . . know that the weed killer is feasting on you and that any one of a list of unpleasant side effects could be in your future: heart attacks, kidney failure, intestinal parasites, collapsed veins, loss of sexual interest, sores in the rectum, skin so thin it splits, weight loss, weight gain, extreme fatigue . . . olfactory hallucinations, severe skin burns, permanent hair loss, and of course, the stress induced by waiting for the advent of any of the above. You begin to wonder. Is this how the end begins? (2004, 49)

First, Lord marks here the lasting health consequences of treatment with the red devil—the most serious of which include infertility, congestive heart failure, liver damage, and neurological problems. These effects produce a state where the subject is entered into a treatment without end, treatments that trouble and indeed *undo* dominant understandings of selfhood which are contingent on the idea of the body/self as closed, static, and autonomous. Instead, such health effects engender a state where the body/self is experienced—and lived—as unbounded and endlessly precarious. This abject ontology may be recurrently experienced, particularly in *spaces of uncertainty* (such as hospitals or the doctor's office, where there might be an imminent new diagnosis), or in *spaces of intimacy* (such as the shower), when one is confronted with the traces of chemotherapy on the body, such as hair that never grew back or the scar from the port where the drugs were administered. As such, cancer and its treatment are not contained within a particular episode of care but, rather, alter the subject's relation to the body and space. In this context, 'living on' becomes a question of *how to survive treatment injury*—the injury of treatment (Jain 2007). For Jackie Stacey, such survival meant having to develop a new bodily intimacy, where a "constant awareness of physicality" became necessary.[19] Others, including Audre Lorde ([1980] 2006), have spoken of the need to develop new morphological imaginations—new understandings of the body as constantly changing and having to be forever re-learnt—and, correspondingly, a new ontology of the self to be formed—where the sense of self *shifts* with the unfolding permutations and reconfigurations of the body.[20]

Second, Lord's statement of "[y]ou begin to wonder, is this how the end begins?" marks that 'living on' after chemo also becomes a question of how to proceed within the epistemological and material folds of seeing your own vanishing point. This new reality alters the subject's relation to time. To *live out* the effects of such treatment is to understand the impossibility of a return to 'life' as it was known before—when life was understood as exclusive of death. Instead, death is brought into life, new tactics of living with death as a companion must be developed, and the subject is compelled to practice contingency. Now, as one cancer patient has noted: "I stare into the eyes of my corpse. But I still feel, so I know I still live. And for life, for my life, I will continue."[21]

While several complicated points about 'life' can be made from this statement, here we are interested in the way the statement highlights the core ideas of our analysis: the organizing principles of Western oppositional logic that structure what we know as subjectivity and life are *undone* by cancer and the abject ontologies induced by its treatment through the Adriamycin and Cytoxan chemo regime. Looking at chemotherapy enables us to see both the ways these boundaries are governed within and by a strict regime of prohibition *and* the precarity of such a regime. This precarity—the ambiguity of these boundaries—is inherent to *all* human existence. Cancer and its treatment through chemotherapy brings this into sharp relief: inside/outside self/other, familiar/foreign, me/not-me and, finally, life/death refuse clear separation. 'Living on' after chemotherapy involves surviving this knowledge and the experience of failing to adequately express these supposed separations. It ultimately involves surviving in the face of what Eve Sedgwick, shortly before her death from cancer, described as the unbounded state of "free-fall interpretive panic" (1999, 154).

In this article, we have explored the abject ontologies of cancer investigation/detection and treatment as but one effort—situated within feminist scholarship—to highlight the embodied experiences related to cancer. Given this account, it seems imperative that we reorient our ethical and political response to cancer in the public realm, to galvanize a sociality that addresses abject ontologies, panic, pain, and death. At one level, chemo-therapies and their toxic afterlife ask us to broadly consider why poisoning ourselves individually and under biomedical authority serves as our best alternative to fighting the consequences of the inability (unwillingness) to de-toxify our poisonous world (Lorde [1980] 2006).[22] At another level, the abject ontologies we have examined ask us to rethink our public cancer-politics. Currently, this politics centralizes triumphant survivorship and recuperating the clean and proper body, generally by means of effective treatment and future-oriented promises of 'the cure.' We battle cancer to vanquish it and regain corporeal mastery, sovereignty, and wholeness. But as we have seen, such pursuits are tenuous at best and foreclosed at worst. How might we then reframe our public discourse in such a way that allows for the messy realities of those living with and dying from cancer to be recognized? How, ultimately, might we meditate on cancer differently in order to witness, mourn, honor, and raise new questions about the material politics and ontological terror of cancer?

Endnotes

[1] Other representations of cancer as monster appear, for instance, in the novel, *A Monster Calls* (Ness, 2011).
[2] For a general overview of 'freakery' and freak discourse, see Garland-Thompson (1996).
[3] We use the term *ontology* here to refer to the 'nature' of being or what exists. Necessarily, however, we do not presuppose there is a 'truth' to this 'nature' of being, but instead use the word to mark how certain ways of being or forms of existence are discursively framed (for instance, within biomedicine) or subjectively experienced (and here experience must also be understood as always-already fashioned through socio-cultural processes of meaning-making).
[4] This is addressed below. Cancer exceeds the boundaries of what we know as life, because it develops when the cell growth and division essential for life neglects all growth control mechanisms and the cells themselves lack the "differentiated, specialized traits of their ancestors" (Varmus and Weinberg cited in Stacey, 1997, 80). Undifferentiated, these cells do not have the representative characteristics of other cells of the organ that houses them, and they replicate until they outnumber healthy cells.
[5] Also see Shildrick's chapter 'The Self's Clean and Proper Body' (2002, 48-67).
[6] According to Kristeva, the life/death dyad most clearly registers at the sight of the corpse: "[c]orpses *show me* what I permanently thrust aside in order to live. These bodily fluids, this defilement, this shit are what life withstands, hardly and with difficulty, on the part of death" (1982, 2).
[7] See, for instance, Broom and Kavanagh (1998) and Yadlon (1997).
[8] Shildrick 1997; Cohen 2009.

[9] BRCA1 (located on chromosome 17 and BRCA2 (chromosome 13) belong to a class of genes known as tumor suppressors; in normal cells, BRCA1 and 2 help ensure the stability of the cell's genetic material and help prevent uncontrolled cell growth. A recent study estimated that about 72% of women who inherit a harmful BRCA1 mutation and about 69% of women who inherit a harmful BRCA2 mutation will develop breast cancer by the age of eighty. The study also estimated that about 44% of women who inherit a harmful BRCA1 mutation and about 17% of women who inherit a harmful BRCA2 mutation will develop ovarian cancer by the age of eighty (see Kuchenbaecker, Hopper, Barnes, et al., 2017).
[10] However, not every woman in families that carry the mutations, and not every cancer in such families, is linked to one of the BRCA genes. Furthermore, not every woman who has a harmful BRCA1 or BRCA2 mutation will develop breast and/or ovarian cancer. For more on the controversial patent rights case, see Matloff and Caplan (2008).
[11] On IVF gene selection and preimplantation genetic diagnosis see Mohney (2016), Bitran (2018), and Breastcancer.org (n.d).
[12] See Ehlers and Krupar (2019).
[13] The body is generally absent to consciousness when it is in a state of health (Leder 1990). If detected, however, cancer rules out the possibility of the body remaining absent and instead it becomes a highly present reality.
[14] This is killing in order to 'make live,' a biomedical imperative that produces a range of specific forms of abjection.
[15] To take this a step further, for Arthur Frank, "chemotherapy fits with disturbing ease into Elaine Scarry's definition of torture as 'unmaking the world'" (in Gubar 2011, 653).
[16] Many patients on the community forums of Breastcancer.org (one of our major ethnography sites in previous studies) describe the sensation of the drug in the veins as simultaneously ice-cold and burning.
[17] Also see Segelov (2006) and Schirrmacher (2019).
[18] See ABC News (2008).
[19] Stacey states that her "body would remember the traumas of treatment. The trigger may have been an association of somatic sensation with place, taste, or sound" (1997, 100).
[20] See Ehlers (2016) and Lorde who, for instance, asks: "how do I live with myself one-breasted? What posture do I take, literally, with my physical self?" ([1980] 2006, 47).
[21] See Dumas (2012).
[22] Importantly, we need to recognize how this disease ravages particular populations, communities, and bodies, with a particular genocidal impact on women of color. See U.S. Cancer Statistics Working Group (2020).

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