

Making Live and Letting Die

Cancerous Bodies between Anthropocene Necropolitics and Chthulucene Kinship

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Abstract With a focus on global cancer epidemics, the article discusses biopolitics in the Anthropocene against the background of a notion of dual governmentality, implying that efforts to make populations live and tendencies to let them die are intertwined. The conceptualization is based on postcolonial scholar Achille Mbembe's notion of necropolitics and cultural critic Lauren Berlant's notion of slow death, developing Foucauldian understandings of biopower. Liver cancer and breast cancer serve as cases showing the operations of an Anthropocene necropolitics, that is, its modes of working through political neglect of carcinogenic effects of conditions of poverty in postcolonial capitalism and chemical modernity. The article introduces Anthropocene necropolitics as an analytics, useful for a critical understanding of the global cancer epidemics. But it aims also to transgress a merely critical approach and to contribute to the search for critically affirmative points of exit into new and more promising worlding practices. Therefore, it engages in the discussion of the Anthropocene concept's lack of potentials to go beyond critique. Instead, the author tries out Donna Haraway's proposal to complement the Anthropocene concept with the figuration of Chthulucene, calling for a shift of ethical stance and position of enunciation from the sovereign (white, Western) "I," waging "war" on cancer to a "we," based on a planetwide kinship of vulnerable bodies. Underlining that this shift can also commit to alternative modes of writing, the article ends with a poem, "Anthropos and the Canary in the Mine." The poem situates the analysis in the entanglement of political, ethical, theoretical, and personal passions brought about by the author's process of mourning her life partner's cancer death.

Keywords Anthropocene necropolitics, Chthulucene figuration, cancerous bodies, primary liver cancer, breast cancer, ethics of care, planetary kinship.

Act, 1971. The "war" had, by then, been promoted by the American Cancer Society (ACS) for more than two decades. The "war" metaphorics, first interpellated by the leaders of ACS, was inspired by the Manhattan project during World War II and its successful mobilizing of a huge concerted scientific and political effort to create the atomic bomb. For the Nixon administration, the "war" metaphor also resonated with President

Kennedy's Cold War project, launched in 1961, to put a man on the Moon before the Soviet Union. Since the launch of the National Cancer Act, the "war" has been kept alive by several US presidents, and international and national cancer organizations. This "war" against the "emperor of all maladies," as oncologist Siddhartha Mukherjee named cancer in his comprehensive historical account of the disease and oncology, is iconic of modern biopolitics. The efforts of institutions worldwide to combat cancer through research, interventions, and public campaigns seem to reflect the Foucauldian point that modern biopolitics is actively committed to enabling citizens' right to life. The implications of the "war" metaphorics have been critically scrutinzed by several scholars, among others by cultural critic Susan Sontag and science historian Robert Proctor.

With cancer as an example, this article discusses how the biopolitical efforts to "make [populations] live," in mainstream discourses most often framed as a "war" against the disease, are matched by equally strong tendencies to "let [them] die" from it.4 I suggest that the ways in which the "war on cancer" is waged are also iconic for what postcolonial scholar Achille Mbembe conceptualized as "necropolitics," and what cultural critic Lauren Berlant theorized as "slow death," 6 that is, a way of organizing life conditions that lets big segments of populations die. I use Mbembe's and Berlant's frameworks as lenses to discuss cancer as an effect of toxic and unhealthy environments, workspaces, and living conditions. Using liver cancer and breast cancer as examples, I discuss how dominant epidemiological discourses on cancer are embedded in epistemologies of ignorance when it comes to questions of the present cancer epidemics as an effect of "chemical modernity" and postcolonial capitalist conditions of poverty.7 Even though such links are pinpointed by critical environmental movements and researchers, they are downplayed in mainstream Western cancer epidemiology in favor of a focus on individual lifestyles and genetics. This downplaying has been criticized by medical anthropologists and sociologists.8 I draw on these critiques, but embed them in a theoretical framework of intersecting ecocritical, posthuman, and post- and decolonial approaches. In addition to interpellating Mbembe and Berlant, I invoke the concept of the Anthropocene,⁹ suggesting that the ways in which vast populations on a planetary scale are left to die from cancer can be interpreted as an Anthropocene necropolitics.

- 1. Mukherjee, Emperor of All Maladies.
- 2. Rose, Politics of Life Itself.
- 3. Sontag, Illness as Metaphor; Proctor, Cancer Wars.
- 4. Foucault, "17 March 1976."
- 5. Mbembe, "Necropolitics."
- 6. Berlant, Cruel Optimism.
- 7. For "chemical modernity," see Karakasidou, "Emperor of All Terrors," xii.
- 8. Manderson, "Cancer Enigmas"; Brown, *Toxic Exposures*; Mathews, Burke, and Kampriani, *Anthropologies of Cancer*.
 - 9. Crutzen, "Anthropocene Man."

With my reflection on the present cancer epidemic as an expression of an Anthropocene necropolitics, I suggest a critically disruptive approach to the epistemologies of ignorance that I claim characterize dominant Western discourses on cancer, which relegate questions of carcinogenic effects of human-induced pollutants, unhealthy working and living conditions to the margins, while focusing on genetics, individual lifestyles, and cures for the types of cancer, which are dominant in the West. Epistemologies of ignorance refer to epistemologies universalizing certain privileged outlooks, neglecting the possibility of other perspectives. ¹⁰ In this article I aim to critically disrupt epistemologies of ignorance in Western cancer discourses.

However, I also aim to transgress a merely critical approach, suggesting affirmative points of exit into new and more promising worlding practices and imaginaries. Therefore, in the last part, I focus on feminist suggestions to reconfigure the imaginaries, interpellated by the Anthropocene concept, and to unfold an ethics of care, as tools for a combined gesture of critical resistance and affirmative renewal. I unfold my reflections on a situated ethics of care, proposed by feminist philosopher Maria Puig de la Bellacasa, in tandem with a discussion of feminist theorist Donna Haraway's proposal to complement the Anthropocene concept with the figuration of Chthulucene. The latter suggests alternative narratives about a transcorporeal planetary kinship and human/nonhuman cocreations of other futurities than the human-centered ones, interpellated by the Anthropocene concept and its reference to anthropos, ancient Greek for human.

My analysis is developed within the framework of a wider queerfeminist, cultural, and philosophical study of cancer, prompted by my life partner's cancer death some years ago. My critically affirmative approach is situated in a personal relation to cancerous embodiment framed by my process of mourning her. To give voice to the personal stakes, shaping my approach, I end the article with a poem "Anthropos and the Canary in the Mine" (from my forthcoming poetry collection *Vibrant Death*). The poem situates the knowledges unfolding in the article, and articulates the entanglement of ethical, political, theoretical, and personal passions that generated the questions pursued in the analysis. These are questions of how to approach human and nonhuman cancerous embodiment from other perspectives than a "war" waged in the name of the sovereign "I," Humanitas, lurking unmarked and invisible behind the generic mask of Anthropos, 13

- 10. Sullivan and Tuana, Race and Epistemologies of Ignorance.
- 11. Crist, "On the Poverty of Our Nomenclature"; Tsing, *Mushroom*; Haraway, "Anthropocene, Capitalocene"; Haraway, *Staying with the Trouble*; Neimanis, *Bodies of Water.*
 - 12. Bellacasa, Matters of Care.
- 13. It is to be noted that the Anthropocene concept etymologically refers to Anthropos rather than Western modernity's other term for humanity, Humanitas. While the former was developed to account for colonial others, objectified by the Western gaze (i.e., the classic object of Anthropology), the latter accounted for "civilized" humanity and values, by colonial epistemology pointed out as a prerogative of Western thought (Osamu, "Anthropos and Humanitas). It adds to the problematic aspects of the Anthropocene concept that the generic use of the root *Anthropo* erases the asymmetrical power relation between Anthropos and Humanitas.

pursuing a self-proclaimed right to life at the expense of all other human and nonhuman critters. With the poem I want to articulate my belief in poetic truths as a critically affirmative, ethico-politically accountable approach to the search for alternative, biopolitical worlding practices and imaginaries. The poem uses the image of the cancerous body as the canary in the mine—the mine thus becoming an image of a polluted world. With these images, I spell out how the powers of horror of cancer expose necropolitical aspects of postcolonial capitalism prioritizing profit over questioning carcinogenic effects of its mode of production and organizing of life conditions. But through these images, I also want poetically to suggest how the massive planetary scale cancer epidemic perhaps can become a wake-up call, prompting new ways of "life in the capitalist ruins."

Necropolitics and Slow Death in the Anthropocene

Brought into scholarly and political debates by Nobel Prize winner in chemistry Paul Crutzen,¹⁵ the Anthropocene, "the age of man," has become a buzzword, indicating a shift of geological age, taking place due to significant, human-induced alterations of processes of planetary metabolism. Though, while geologists and other natural scientists debate the scientific definition, the Anthropocene concept has also entered the humanities and social sciences as a tool to critically reflect on "accelerating extinctions across all biological taxa and also multispecies, including human, immiseration across the expanse of Terra." Along the lines of this broader, critical use, I analyze the contemporary cancer epidemic as an expression of Anthropocene necropolitics and necropower.

In so doing, I aim to deromanticize "ecomodernist" trends and the idea of a "good Anthropocene," ¹⁷ based on beliefs in the possibility of human stewardship of the Earth through overarching technofix solutions. The current worldwide cancer epidemic seems to be a slap in the face to such beliefs. Globally, cancers continue "to rank among the top ten causes of morbidity and death," ¹⁸ and over the next two decades the World Health Organization (WHO) expects "cancer incidence to increase by 70 percent with new yearly cases hitting 25 million" ¹⁹—an increase foreseen to hit hardest in non-Western countries. Such global statistics make the "wars" on cancer appear as lost from the outset, revealing their technofix tools as blatantly inadequate.

The terms necropolitics and necropower, with which I characterize the worldwide production and upholding of carcinogenic life conditions, including the uncontrolled spread of human-induced carcinogens, is, as mentioned, borrowed from postcolonial

- 14. Tsing, Mushroom.
- 15. Crutzen, "Anthropocene Man."
- 16. Haraway, Staying with the Trouble, 46.
- 17. Lynas, "A good Anthropocene?"
- 18. Manderson, "Cancer Enigmas," 244.
- 19. Mathews, Burke, and Kampriani, Anthropologies of Cancer, x.

theorist Achelle Mbembe.²⁰ Mbembe introduces the concepts, necropolitics and its complement, necropower, in dialogue with Foucault's notions of biopolitics and biopower.²¹ While biopolitics and biopower conceptualize modern society's efforts to enable citizen's right to life, Mbembe argues that additional conceptual tools are needed to theorize how the establishing of sovereign power to expose people to deadly conditions, necropower, is also part of modernity—from the plantations, driven by slave labor, to the Holocaust. When I merge Mbembe's conceptual framework with the mentioned critical uses of the Anthropocene concept, speaking of the current worldwide cancer epidemics as an example of Anthropocene necropolitics and necropower, I also revisit reflections on planetary biopower. Framed as a critique of early space-flight-generated ideas of "terraforming" other planets, that is, through human intervention making them become Earthlike and habitable for humans, I have earlier argued for the notion of planetary biopower as a useful way of critically understanding planetary-scale efforts of domestication.²² As this article's analysis of the worldwide cancer epidemics will show, Mbembe's way of complementing the Foucauldian notion of biopower, related to human bodies and demographics, with the notion of necropower, is, in my view, making sense also when it comes to thinking on the level of planetary bodies.

When speaking about the current worldwide cancer epidemics as an example of Anthropocene necropolitics and necropower, I go beyond dominant biomedical discourses, and an epidemiological focus on individual lifestyles and genetics, instead reading cancer statistics through the lens of postcolonial and ecological critiques. Against this background, I suggest an approach to cancer, which systematically takes into account its worldwide coproduction by carcinogenic conditions related to postcolonial capitalism and "chemical modernity."²³ Thus, I sharpen the critical edge of rare official statements such as the one, found on the International Agency for Research on Cancer (IARC) website, declaring that "most cancers . . . , directly or indirectly, [are] linked to environmental factors and thus . . . preventable."²⁴

To understand the deadly work of cancer as coproduced by entangled socioeconomic, technoscientific, and biological processes, I complement Mbembe's notions of necropolitics and necropower with Berlant's notion of "slow death," defined as "the physical wearing out of a population." Berlant's concept is developed through critical scrutiny of Mbembe's notion of sovereignity, which underpins his concepts of necropolitics and necropower. Berlant argues that sovereign agency in a modern context is to be specified in terms of a "wide variety of processes and procedures involved historically in the administration of law and of bodies." This notion of dispersed sovereign

- 20. Mbembe, "Necropolitics."
- 21. Mbembe, "Necropolitics."
- 22. Bryld and Lykke, Cosmodolphins, 93-118.
- 23. Karakasidou, "Emperor of All Terrors," xii.
- 24. IARC, "About."
- 25. Berlant, Cruel Optimism, 95
- 26. Berlant, Cruel Optimism, 96.

agency is important for my analysis of cancer as an example of Anthropocene necropolitics and necropower.

Berlant also draws attention to Foucault's conceptualization of "endemics" as "permanent factors . . . [that] sap the population's strength."²⁷ Following Foucault, Berlant underlines that endemics produce "slow death"—a "wearing out" of life.²⁸ However, in a modern regime of biopower, endemics also call for counteraction in the shape of the "dispersed management of the putatively biological threat," posed by life's wearing out, to "the reproduction of the normatively framed general good life of a society."²⁹

Though, according to Berlant, such counteraction by the dispersed powers of governmental and nongovernmental agencies *and* the endemics producing slow death are to be understood as two sides of the same coin. She aligns herself with Mbembe's insistence on the production of death next to modernity's biopolitical focus on life and "biological citizenship."³⁰ But she also underlines that "the productive procedures of governmentality and the violence of the state" are not separate. By contrast, in a regime of biopower, the procedures for managing collective life will "include a variety of inducements for managing life's wearing out."³¹ To underpin the dual kind of governmentality at stake here, Berlant quotes Foucault,³² who characterizes the modern biopolitical regime as making populations live, but also letting them die. While human regulatory action is taken to prevent life's wearing out, the endemics that contribute to the wearing out are sustained by other human actions—or lack thereof.

This dual understanding of governmentality is important for an analysis of modern cancer politics. It makes sense of the combination of myriads of governmental and nongovernmental initiatives to wage "war" on cancer, on the one hand, and, on the other, a blatant mainstream political avoidance of in-depth, comprehensive, and systematic investigations and interventions in the relationship between cancer epidemiology and carcinogenic environments, which results in cancer death of vast populations worldwide.

Materials and Methodologies

To unfold my point about cancer as an expression of Anthropocene necropolitics, I chose primary liver cancer and breast cancer as examples. This is, firstly, motivated by the fact that, measured on a global scale, both are very common cancers. Secondly, there are significant differences in the global and local distributions of these cancers, making both apt to exemplify specific geographies of oppression, injustices, and

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27. Berlant, Cruel Optimism, 97; Foucault, "17 March 1976," 244.
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^{28.} Berlant, Cruel Optimism, 95.

^{29.} Berlant, Cruel Optimism, 97.

^{30.} Rose, Politics of Life Itself, 6.

^{31.} Berlant, Cruel Optimism, 96.

^{32.} Foucault, "17 March 1976," 241.

inequalities regarding exposures to carcinogenic conditions. A third and methodologically important reason for my choice is that existing research in both cases sustains the view that anthropogenic coproduction must be taken into account. In the article's next sections, I shall present examples of this research and establish a dialogue with my theoretical claim about the current cancer epidemic as an expression of an Anthropocene necropolitics.

Firstly, I shall demonstrate how, for some cancers, for example liver cancer, the statistics, aggregated in global cancer maps, produced by major cancer organizations such as the IARC, call for interpretations that spell out the involved global inequalities. I shall discuss how the specifics of the uneven *macro-level* geographical distribution of liver cancer, exposed by global cancer maps, make it possible to critically remap the geographical differences onto cartographies of geopolitical inequalities. Moreover, I shall underpin this remapping exercise by references to critical medical anthropological and epidemiological research.

In the second example, breast cancer, I shall concentrate instead on *micro-*geographical differences—in the shape of alarmingly elevated breast cancer incidences in certain neighborhoods of the US, pinpointed by the country's breast cancer movements of the 1990s. Following Brown,³³ I shall rely on epidemiological research carried out by, among others, the Silent Spring Institute, Massachusetts, US. Founded in 1994 with the aim of getting "a lab of our own"³⁴ in order to investigate links between polluted environments and breast cancer, the institute has been an important actor, initiating research that challenges dominant epidemiological paradigms and pushes for new research agendas.

In the next sections of the article, I shall demonstrate how existing research sustains the claim that there are causal links between environmental factors and the occurrence of both liver and breast cancer. However, as an overall framework for the discussion, I shall emphasize that epidemiological research and the pinpointing of patterns of causation are much more complex and difficult in the case of cancer than it is for most other diseases. There are three main reasons for this related to cancer biology and state-of-the-art cancer research. First, biologically, cancer is not one disease, but many. There are over one hundred different types of cancer,³⁵ and the questions of causation are diversified accordingly. Second, there are often many years between cancer causation and outbreak, making it difficult to trace possible links concretely. Third, unlike viral or infectious diseases, it is not well understood what sparks a cancerous process. Even though much is known about carcinogenic effects of many substances (asbestos, aflatoxin, benzene, phthalates, DDT, diethylstilbestrol, glyphosate, cadmium, vinylchlorid, etc.), it is not easy to pinpoint whether, how, or why particular carcinogens

^{33.} Brown, Toxic Exposures.

^{34.} Silent Spring Institute, "About Us."

^{35.} NCI, "Cancer Types."

set cancerous processes in motion in individual cases. In addition to these three problems, stemming from cancer biology and current (lack of) scientific knowledge about it, which all complicate an evidence-based approach to anthropogenic cancer causation, one more important set of problems must be noted: these general difficulties leave ample room for conflicting views. So as there are many stakeholders, cancers come to stand out as "contested illnesses," that is, illnesses causing "scientific disputes as well as extensive public debates."36 A focus on cancer causation through genetics and lifestyles is characteristic of dominant epidemiological paradigms; however, this focus is contested and challenged by critical epidemiologists and health and environmental activists, arguing about exposures to toxic environments and unhealthy living and working conditions. In return, governments that do not want to take responsibility for environmental pollution and industries involved in production of carcinogenic materials seem prone to invest in science that can downplay the role of carcinogens, important for profitable production. Science historian Robert Proctor documented how major industries (tobacco, asbestos, and petrochemical industries) during the latter part of the twentieth century, as a general strategy, hired scientists to produce doubt about carcinogenic effects of their products.37 A recent example is heated debates in the European Commission and Parliament during the fall of 2017 regarding a ban on the pesticide Roundup, chemically based on the carcinogen glyphosate. The ban is strongly disputed by the agrochemical and agricultural industry (Monsanto), relying on the involvement of scientists to sustain its arguments. Governments and politicians stand divided, depending on their ties to agricultural organizations defending the use of Roundup for economic reasons.38

Global Relations, Postcoloniality, and Poverty Example: Primary Liver Cancer

Recent International Agency for Research on Cancer (IARC) figures and global cancer maps indicate that there are 14.1 million new cancer cases, 8.2 million cancer deaths, and 32.6 million people living with cancer (within five years of diagnosis) worldwide, and that these figures are increasing.³⁹ The American Cancer Society (ACS) notes that "economically developing countries" are affected more than "developed" ones; 57 percent (8 million) of the new cancer cases in 2012, and 65 percent (5.3 million) of the cancer deaths, occurred in the former.⁴⁰ The figures demonstrate that cancer is a serious global health problem, and one that hits differently geopolitically situated populations differently. They also effectively dispel the myth that cancer is a disease of Western

- 36. Brown, Toxic Exposures, xiv.
- 37. Proctor, Cancer Wars, 101-32.
- 38. See, e.g., Blenkinson, "EU Hits Deadlock."
- 39. IARC. Globocan 2012.
- 40. ACS, Global Cancer Facts and Figures.1.

modernity, critically scrutinized by Susan Sontag.⁴¹ However, when Sontag first published her critical discussion of Western cancer imaginaries in 1979, she could still report that "rich countries have the highest cancer rates."⁴² The mentioned IARC and ACS figures show that this is not statistically true anymore.

Primary liver cancer, my first example, is one of the cancers that exposes huge geopolitical differences, and which, in particular, operates outside the Western hemisphere. In globally aggregated figures, this cancer is "the second leading cause of cancer death in men and the sixth leading cause among women, with about 745,500 deaths in 2012," and the overwhelming majority of cases are found in Africa and East Asia. Reasons for global differences in the epidemiology of certain cancers already were investigated under the heading "geographical pathology" or "geo-pathological" research in the 1950s/1960s. Back then, cancer was related to patterns of global difference regarding occupational hazards, certain kinds of infectious diseases, and nutritional factors. It is noticeable that liver cancer in this early research stood out as *clearly* related to geographical difference. A. V. Chaklin, for example, drew this conclusion, sustained among others by the observation that 90 percent of cancer deaths among Bantu people in the southern part of Africa were liver cancer deaths, while the comparable figure for Western Europe was a little more than I percent.

Current liver cancer epidemiology suggests that the high incidence in Africa and Asia is linked to factors that easily can be connected to poverty and conditions produced by postcolonial capitalism.⁴⁷ Some factors are food related. Poorly stored grain and other decaying foodstuffs produce certain kinds of molds, aflatoxins, with carcinogenic effects.⁴⁸ Another food-related reason is connected to opisthorchiasis, an infectious liver disease, common in certain parts of Asia. In addition to nutritional aspects, infection with hepatitis B and C, also common in parts of Africa and Asia, are on the list of medically confirmed risk factors regarding liver cancer.⁴⁹ While aflatoxins in themselves are carcinogenic, the reasons for the hepatitis-induced liver cancers are primarily to be found in the scar tissue, produced as a consequence of the infection. Liver cancers develop not necessarily, but easily and regularly in these kinds of scar tissue. Finally, opisthorchiasis can become carcinogenic for a multiplicity of reasons, including carcinogens produced by the chronic infection and also scar tissue.

- 41. Sontag, Illness as Metaphor, 71.
- 42. Sontag, Illness as Metaphor, 15.
- 43. Primary liver cancer (Hepatocellular Carcinoma, HCC) is often confused with liver metastases from anal and intestinal cancers, but represents a distinctly different cancer type, which, as opposed to the latter, is rare in Western countries. A related category is bile duct cancer (cholangiocarcinoma, CCA) which, when occurring within the liver region, is categorized as liver cancer. CCA is also rare in the West.
 - 44. ACS, Global Cancer Facts and Figures, 17.
 - $45.\ Higginson, "From Geographical Pathology"; Mori and Shah, "A Comparative Geo-Pathological Study."$
 - 46. Chaklin, "Geographical Differences," 352-53.
 - 47. ACS, Global Cancer Facts and Figures, 20.
 - 48. Livingston, Improvising Medicine, 35.
 - 49. ACS, Global Cancer Facts and Figures, 19.

The huge amount of non-Western liver cancers with distinct causation patterns reveals a gap in cancer research and intervention, which sadly resonates well with the dual governmentality, through the lens of which I characterize modern biopolitics as based on Anthropocene necropolitics. On the one hand, the "war on cancer" involves myriad agencies trying to counteract the deadly work of cancer to make certain populations live. Cancer research is a big, prestigious academic, political, and commercial business in the Western world. Governments and strong patient organizations promote such research, and the pharmaceutical industry profits from the sale of cancer drugs. Moreover, the production of detailed global statistics is also a telling example of governmentality, operating through statistical surveillance. However, on the other hand, when it comes to research and interventions regarding cancers that, like liver cancer, have predominantly emerged outside of the Western hemisphere, huge populations seem to be left to die without much global attention. Major Western funding of cancer research has targeted cancers that are common in the West (e.g., breast and lung cancers). As an outcome of this, there have been more research on and experiments with treatment options and cancer drugs for these cancers, which over the years have resulted in better survival rates for some of the cancers that are common in the West.

Dominant cancer epidemiology acknowledges that the high incidence of hepatitis in Africa and Asia, together with aflatoxins, are factors that lead to high liver cancer incidence in these regions, with opisthorchiasis added for Southeast Asia. However, these factors are often simply reported as endemic to the areas, but silenced as global health problems requiring attention and action. A double standard is clear, as articulated, for example, by Olufunmilayo Lesi.50 From a location at the University of Lagos, where the fatal effects of liver cancer-causing factors are visible in everyday medical practices, Lesi complains that "viral hepatitis has been neglected by the international community, policy makers, governments, health care providers and the public." She also notes that even though "the virus was discovered over 50 years ago and an effective vaccine has been available for more than 20 years, the complications of chronic hepatitis B infection are still the cause of significant illness and death in Africa."51 As scar tissue after hepatitis infections, as mentioned, make up fertile soil for the development of primary liver cancer, general vaccination against hepatitis would also prevent liver cancers, in the same way that cervical cancers in the West now widespread are prevented through vaccinations against Human Papillomavirus (HPV).

It also deserves notice that the WHO lists opisthorchiasis among the "neglected" tropical diseases,⁵² that is, tropical diseases that are basically under-researched. A recent article by a Russian research team underlines this aspect of neglect, critically

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50. Lesi, "Hepatitis B in Africa."
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^{51.} Lesi, "Hepatitis B in Africa," 1.

^{52.} WHO, "Neglected Tropical Diseases."

stressing the gap between the seriousness of the problem and the lack of research on it. The article complains that "despite the unarguable public health importance of these infections [opisthorchiasis], both in terms of numbers of humans infected worldwide and clinical impact, it has been given relatively little recognition by health authorities, grant-giving agencies, and the pharmaceutical industry." Similar to the case of hepatitis, it can here too be argued that the general neglect of opisthorchiasis as a global health problem is important not only in relation to the infection per se. It also results in a problematic lack of endeavors to prevent liver cancers (hepatic bile duct cancers, in particular), developing from the infection.

These brief references to the existing marginalization of questions regarding prevention of hepatitis and opisthorchiasis infections point in the direction of a significant medical and political neglect of liver cancer. Even though since the 1950s it has been scientifically acknowledged that liver cancer is unevenly geographically distributed—rare in the West, common in Africa and Asia—the intersections of this particular type of cancer with poverty and other effects of postcolonial capitalism are left to unfold in silence under the radar of Western cancer research. Moreover, what is at stake here, is not only a question of prevention of infectious diseases that can lead to liver cancer. Research on liver cancer seems also to have been influenced by the geopolitical patterns of distribution. It is telling for the marginalized status of liver cancer research that Mukherjee's comprehensive history of cancer and oncology has only one index entry on liver cancer, while breast cancer, for example, has thirty entries.⁵⁴ When my life partner was diagnosed with liver cancer in Denmark in 2010, we also learned from personal experience how narrow the palette of treatment options and how limited the knowledge about this cancer type were compared to cancers, more common in the West, such as breast or lung cancer. A devastating meeting with a chief oncologist, who was called to my partner's bedside after the resection of her right liver lap, is, for example, etched into my memory. With a fatal look in his eyes, this oncologist told my partner and me that the only available drug against a metastasizing liver cancer, Nexavar/ Sorafenib, had many severe side effects and was not very effective, so he would not recommend it.

Liver cancer seems to share the marginalization within Western cancer research with several other cancers, developing from subclinical (symptomless) infections such as hepatitis. Historian Julie Livingston's study of an "emerging cancer epidemic" in Africa pinpoints a number of reasons for the neglect and double standards of Western cancer research related to such cancers (with the exception of cervical cancers caused by Human Papilomavirus, HPV infection, which have attracted Western attention).⁵⁵

^{53.} Ogorodova et al., "Opisthorchiasis," 1.

^{54.} Mukherjee, Emperor of All Maladies.

^{55.} Livingston, Improvising Medicine.

According to Mukherjee,⁵⁶ there were tendencies in cancer research of the 1960s and 1970s to put focus on viral causation pathways—tendencies that were important for the understanding of cancers in Africa⁵⁷—and which by implication might have led to more attention to and research on liver cancer in its capacity as an extremely common cancer on the continent. Livingston also notes that the establishment of the IARC in 1965 had the effect that cancer research emerged in different African countries. However, during the 1970s, after President Nixon's declaration of the "war on cancer" and ensuing new funding possibilities in the US, the interest of leading Western cancer research centers shifted away from virus- and infection-generated cancers and from broader environmental questions about epidemiology. Further research on virus- and infection-generated cancers could probably have benefitted an understanding of the emerging African cancer epidemic that, according to Livingston, to a large extent is to be considered as generated by precisely these kinds of cancers.⁵⁸ Instead a narrower focus on molecular biology and genetics became pivots of dominant cancer research.⁵⁹

A parallel epistemological ignorance regarding research questions that could have been relevant for research on cancers in Africa was also the hallmark of the waves of new research that were prompted during the 1980s and 1990s, when the marketization of cancer drugs and high-tech cancer therapies became profitable for the pharmaceutical industry. These therapies were economically out of reach for the majority of African cancer patients and non-Western health-care systems. The effect was that the needs of these patients did not come to matter in drug development and related research. Or, in other words, this basic market mechanism makes sense of the lack of research for effective drugs against cancers such as liver cancer, which only affect a minority of Western patients.

With the conspicuously uneven global distribution, and the indicated layers of neglect and marginalization of primary liver cancer, compared to cancers that are common in the West, this disease spells out the global-scale necropolitical letting-die aspect of modern biopolitics with utmost clarity; liver cancer represents a neglected global health problem. Twisting Judith Butler's reference to un/grievable lives,⁶¹ and Mbembe's to non/disposable lives,⁶² that is, lives that count and lives that do not count, I shall, therefore, conclude this first part of my analysis of Anthropocene necropolitics, by emphasizing that the case of liver cancer demonstrates how the questions regarding whose and which cancers count are inextricably intertwined.

- 56. Mukherjee, Emperor of All Maladies, 280.
- 57. Livingston, Improvising Medicine, 35-36.
- 58. Livingston, Improvising Medicine, 35.
- 59. Livingston, Improvising Medicine, 37.
- 60. Livingston, Improvising Medicine, 40-43.
- 61. Butler, Precarious Lives, xiv.
- 62. Mbembe, "Necropolitics," 27.

Toxic Exposure on a Neighborhood Level

Example: Breast Cancer

My next example, breast cancer, is also interpellated to testify to the dual governmentality of modern biopolitics, its double operations of making-live and letting-die. However, by contrast to liver cancer, breast cancer is hitting both "the West and the Rest." Vulnerability to breast cancer establishes a sad link among women globally. It is "the most commonly diagnosed cancer among women in the vast majority (140 of 184) of countries worldwide making it the only cancer that is common among women in all regions of the world." Overall, breast cancer mortality "increased steadily" during the last decades of the twentieth century, 4 and recent figures indicate that 25 percent of all new cancer cases in women worldwide are breast cancers.

So how do the making-live and letting-die aspects of modern biopolitics work here? Breast cancer is figuring prominently among the cancers that have attracted research attention. This has resulted in increasing survival rates, particularly in Western countries; the making-live aspect is clear. But as prognoses on average are much poorer in non-Western countries, 66 it is possible to trace the letting-die aspect through macrolevel geopolitical comparisons here too. However, my concern in this section is microgeographical differences. I chose breast cancer as my second case because significant examples of micro-level, local differences have been exposed and scrutinized in some areas of the US, thanks to collaborations between critical scientists, local breast cancer activists, and environmentalists. 67 Through such alliances, alarmingly high breast cancer incidences have been pinpointed in specific locations in the US. These local cancer occurrences make visible a micro-level dimension of the Anthropocene necropolitics of letting populations die, which presumably could be generalized to other countries as well.

Building on an analysis of the environmental breast cancer movements in three locations in the US: Long Island, Cape Cod, and the San Francisco Bay Area, Brown discusses breast cancer activism in the 1990s with a starting point in local women's everyday experiences of exceptionally increased cancer incidences. For example, in most of the towns of Cape Cod in Massachusetts, the breast cancer incidence was more that 20 percent higher than the state average in the 1980s and 1990s, while the cancer incidence in Marin County of the San Francisco Bay Area was found to increase "6 times faster than statewide" in the same period. The geographically bounded occurrence of exceptionally high numbers of breast cancers prompted activist-scientist alliances to start investigating potential environmental causes.

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63. ACS, Global Cancer Facts and Figures, 37.
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^{64.} Brody and Rudel, "Environmental Pollutants and Breast Cancer," 1007.

^{65.} ACS, Global Cancer Facts and Figures, 37.

^{66.} ACS, Global Cancer Facts and Figures, 37

^{67.} Brody and Rudel, "Environmental Pollutants and Breast Cancer." See also Brown, Toxic Exposures.

^{68.} Brown, Toxic Exposures.

^{69.} Brody and Rudel, "Environmental Pollutants and Breast Cancer," 1009.

As described by Brown,⁷⁰ a general outcome of the US environmental breast cancer movement is that dominant epistemological paradigms have been challenged, which link breast cancer to what is considered to be individual lifestyle choices such as reproductive factors (age at first pregnancy, breastfeeding), obesity, lack of physical activity, as well as to genetics.⁷¹ But, as activist-scientist alliances point out, the lifestyle factors are very general and cannot explain an extraordinarily high breast cancer incidence in a geographically delimited neighborhood. Moreover, it is argued that genetic breast cancers account for less than 10 percent of all cases,⁷² and that genetic causation cannot explain why breast cancer rates in the US increased by more than 40 percent between the 1970s and the late 1990s,⁷³ that is, "in a period that is too short for genetic changes to occur in the population."⁷⁴

By contrast to the dominant focus on individual lifestyles and genetics, activist-scientist alliances have posed questions about potential environmental, human-induced causation, and focused on endocrine-disrupting compounds, drinking water, air pollution, household chemicals, workplace chemicals, pesticides, the location of waste disposal sites, and on combined genetics/environmental effects. They have also pushed for more "upstream" investigations, that is, investigations of causes and prevention rather than a "downstream" focus on intervention in existing cancers. Finally, they have argued for investigations that look at causation from a collective perspective (what caused so many cancers in the population in this specific environment?) rather than applying an individual-centered lens (why did this individual get cancer?).

The science-activist alliances have turned breast cancer into a contested illness and sparked scientific and political disputes over environmental causation, which seemingly have influenced mainstream cancer research. Thus, the ACS now lists some "environmental risk factors" for breast cancer next to lifestyle choices and genetics.⁷⁶ Furthermore, while the ACS states that "epidemiological studies have not found clear relationships between environmental pollutants and breast cancer,"⁷⁷ the organization nevertheless acknowledges that causation research faces many difficulties, and that the issue of potential environmental causation "continues to be an active area of research."⁷⁸

However, even though a potential environmental causation thus is acknowledged by the mainstream, the letting-die aspect is also at work. Silent Spring Institute

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70. Brown, Toxic Exposures.
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^{71.} ACS, Global Cancer Facts and Figures, 38-39.

^{72.} Brody and Rudel, "Environmental Pollutants and Breast Cancer," 1008.

^{73.} Brody and Rudel, "Environmental Pollutants and Breast Cancer," 1007.

^{74.} Brown, Toxic Exposures, 65.

^{75.} Brown, Toxic Exposures, 58-63.

^{76.} ACS, Global Cancer Facts and Figures, 39.

^{77.} ACS, Global Cancer Facts and Figures, 39.

^{78.} ACS, Global Cancer Facts and Figures, 39.

researchers have pointed out that environmental breast cancer causation is underresearched and badly funded.⁷⁹ They have also for years raised critique of the limited
scope of dominant epidemiological breast cancer research, pointing out that only "very
few of the compounds identified as endocrine disruptors or animal mammary carcinogens have ever been targeted in a human breast cancer study," even though strong
toxicological evidence indicates a "ubiquitous" environmental presence of, among
others, endocrine-disrupting pollutants.⁸⁰ In a comprehensive literature review regarding studies of relations between environmental pollutants and breast cancer, Silent
Spring Institute researchers underpin the point further. They state that if the results of
animal-based breast cancer studies can be transferred to humans, then the "reducing or
eliminating of chemical exposures could have substantial public health benefits," minimizing human breast cancer risk considerably.

It also seems to be telling for the Anthropocene necropolitics at play, when it comes to environmentally caused cancers, that the US President's Cancer Panel (advising presidents since 1971) organized a conference on cancer and the environment in the early period of President Barack Obama's time in the White House, ⁸² but apparently has not discussed the issue since. President Donald Trump, moreover, seems prone to generally minimize the impact of the panel by not appointing new members to replace people who left. These signs of neglect resonate with recent complaints raised by Kathryn Rodgers from the Silent Spring Institute. Under the title "EPA Won't Protect Americans against Breast Cancer," 83 she once more brings up the issue of the limitations of mainstream investigations of relationships between environmental pollutants and breast cancer. Rodgers points out that the US Environmental Protection Agency (EPA) under the Trump administration not only ignores the knowledge of links between toxic exposures and breast cancer in animals when deciding about regulations regarding toxic substances, but that it even lets the chemical industry "rewrite" the rules. ⁸⁴

So even while breast cancer for years has been a main priority in Western cancer research and public campaigns, the letting-die aspects of cancer biopolitics, or what I have framed as Anthropocene necropolitics, are also making themselves felt here. While the liver cancer case demonstrated the importance of posing the questions whose and which cancers count, the breast cancer example points us in the direction of another set of critical questions: which causes count and which don't? When it comes to breast cancer, my analysis indicates that genetics and so-called individual lifestyle choices, related among others to women's reproductive behaviors (including those that

- 79. Brody and Rudel, "Environmental Pollutants and Breast Cancer."
- 80. Brody and Rudel, "Environmental Pollutants and Breast Cancer," 1016.
- 81. Brody et al., "Environmental Pollutants and Breast Cancer," 2668.
- 82. Lefall and Kripke, Reducing Environmental Cancer Risk.
- 83. Rodgers, "EPA Won't Protect Americans against Breast Cancer."
- 84. Rodgers, "EPA Won't Protect Americans against Breast Cancer."

are related to women leading more autonomous lives, for example, resulting in late or no childbirths) count, while carcinogenic effects of chemical pollutants in the environment and endocrine disruptive compounds are not getting the attention they seem to call for. Instead, the latter are hidden behind smoke screens, conjured up by industries and politicians, prepared to wage "wars" on cancer, but only within certain profitable limits. As part of the conclusion on this part of the analysis, it should also be noted that even though the case for environmental breast cancer causation was concentrated to arguments of science-activist alliances in the US, pesticides and endocrine disruptors, some of the factors pointed out as potential agents behind the breast cancer epidemics of the late twentieth and early twenty-first centuries, make up global health problems. Therefore, it seems reasonable to claim that further research may show that they have a more global validity.

From Anthropocene Necropolitics to Chthulucene Kinship

Through the examples, liver and breast cancer, I have demonstrated how current biopolitics of cancer is fraught with necropolitical dimensions, becoming visible as soon as we start asking critical questions about whose and which cancers count, as well as about which causes count. The way in which the current cancer epidemic, in addition, appears as a global-scale health problem, is my background for linking to the Anthropocene concept, in the broad critical version, on which I commented in the introductory sections. More precisely, I suggest that the current global cancer epidemics can be understood as an expression of an Anthropocene necropolitics in the sense that the increasing world-wide occurrence of the disease should be critically understood as an effect of human activity in terms of a planetary scale necropower, profiled through postcolonial capitalist conditions and environmental pollution.

The multilayered approach, interpellated through the Foucauldian framework of making-live and letting-die, also made it clear that the "ecomodernist" imaginary of a "good anthropocene," where science and technology are used "as our most potent tools for first identifying and then solving problems," is based on illusions. The idea of positive human stewardship of the Earth through overarching technofix solutions, which also sustain the belief in winning the "war on cancer," projects the making-live aspects of biopolitical governmentality into a future of technoscientific enhancements. But this idea—cynical or naive—takes into account *neither* the necropolitical letting-die mechanisms nor the dangerous and illusionary hubris of the modern belief in a human savior, technoscientifically able to control a docile and domesticated more-than-human world.

However, a rejection of these kinds of beliefs and illusions raises the question, how to proceed from the critique of Anthropocene necropolitics and planetary necropower

85. Lynas, "A good Anthropocene?"

to a critically affirmative search that both "stays with the trouble" and simultaneously looks for alternative approaches to the cancer epidemics. To offer an answer to these questions, I shall revisit my analysis of cancer as Anthropocene necropolitics, diffracting it from two perspectives. To one is Haraway's suggestion to complement the critical discussion of the Anthropocene with the figuration of Chthulucene and its embedded plea for the unfolding of a corpo-affective and ethico-political recognition of a planetwide human/nonhuman and transcorporeal kinship, as an alternative to the Anthropocene concept's focus on human exceptionalism and the sovereign "I" of Humanitas. The other perspective to be involved in my act of diffraction is feminist ethicist Maria Puig de la Bellacasa's rethinking of science and technology scholar Bruno Latour's plea for a transformation of "matters of fact" to "matters of concern" through the concept of "matters of care."

Cancer: From Matter of Fact to Matter of Concern

In order to affirmatively push the critique of the global-scale cancer epidemic as an expression of Anthropocene necropolitics and planetary necropower toward a new understanding of cancer as a matter of transcorporeal planetary concern, care, and kinship,92 I shall, first, review my previous analysis through the lens of Latour.93 Against this background, I shall claim that my analysis so far has transformed the global cancer epidemic from a matter of statistical fact to a matter of concern in Latour's sense. According to Latour, a matter of concern is a technoscientific assemblage profiled as troubling in complex ways that prompt disobjectification and make it possible to link critically to the problem's context of production, and in so doing pave the way for more effective ethico-political and socio-technical interventions.94 Along these lines, I suggest that my previous analysis of cancer as an expression of Anthropocene necropolitics and planetary necropower shifts the disease's status. From appearing as a "matter of fact" (a compilation of quantitative data in global cancer statistics), the cancer epidemic is changed to a "matter of concern": a serious global health problem, disobjectified and contextualized as an assemblage of entangled (geo)political, economic, environmental, cultural, biomedical, and biological dimensions.

- 86. Haraway, Staying with the Trouble.
- 87. Along the the lines of Haraway *Modest_Witness@Second_Millenium*, 268–74; Barad *Meeting the Universe Halfway*, 71–94; and Lykke *Feminist Studies*, 154–55, I see diffraction as a postdisciplinary methodology, apt for going beyond reflection into a mode of troubling established connections and creating new perspectives through unexpected interference patterns.
 - 88. Haraway, Staying with the Trouble, 103.
 - 89. See note 13.
 - 90. Latour, "Why Has Critique Run out of Steam?,"
 - 91. Bellacasa, Matters of Care.
- 92. See Haraway, Staying with the Trouble; Bellacasa, Matters of Care; and Latour, "Why Has Critique Run out of Steam?"
 - 93. Latour, "Why Has Critique Run out of Steam?"
 - 94. Bellacasa, Matters of Care, 31-39.

Cancer: From Matter of Concern to Matter of Chthulucene Care and Kinship

While Bellacasa agrees with Latour that transformations of matters of fact to matters of concern are important, she also argues that a caring relationality needs to be added to Latour's equation, not in the sense of universal moral principles, but as a situated ethics of caring that includes "a strong sense of attachment and commitment" and "joins together an affective state, a material vital doing, and an ethico-political obligation." I understand Bellacasa's advocacy for transformations of matters of concern to matters of situated care as resonating with Haraway's invitation to move from critique, based on the Anthropocene concept, to the Chthulucene figuration, critically affirmatively interpellating global human/nonhuman, transcorporeal, and affective—planetwide—kinship relations.

To push my analysis of the ways in which cancer becomes a matter of concern as Anthropocene necropolitics into a not only critical, but also affirmative mode, I shall diffract it along the lines of Haraway's and Bellacasa's interventions. Along the lines of Haraway's plea for recognition of planetary kinship ties, I shall, first, argue that the massive global cancer incidence, when transformed from a matter of statistical fact to a matter of concern as an expression of planetary necropower, can be brought to resonate with other kinds of planetary-scale, human-induced dying and extinction; for example, the bleaching and dying coral reefs, which, as Haraway points out, 96 were among the phenomena that first sparked the Anthropocene debate. Diffracted along the lines of Haraway's argument for a comprehensive transspecies and transcorporeal kin making, 97 this resonance can be pushed toward imagining a planetary kinship of vulnerable bodies exposed to Anthropocene necropolitics, such as mammalian bodies, human and nonhuman, burdened by metastasizing, wildly growing cancers, and other effects of the global necropolitical enterprise of making-live and letting-die.

Second, I shall diffract my analysis also along the lines of Bellacasa's plea for a strong corpo-affective commitment and a posthuman, decentered, and deexceptionalized ethico-political obligation; that is, an ethical obligation that is not based on universal moral principles, but instead anchored in corpo-affectively grounded, everyday-life-oriented and material caring practices, performed within more-than-human networks. I shall suggest that this moral obligation and the recognition of kinship ties within the framework of the flat posthuman ontology, suggested by Haraway's Chthulucene figuration, implies a radical shift of position of enunciation. In order to imagine a corpo-affectively grounded ethico-political commitment to care within a flat Chthulucene ontology, the sovereign speaking on behalf of others from the disembodied and exceptional position of the Anthropocene subject has to be given up. Instead Chthulucene subject positions must be tried out, that is, positions that imply that all critters

- 95. Bellacasa, Matters of Care, 42,
- 96. Haraway, Staying with the Trouble, 56.
- 97. Haraway, Staying with the Trouble, 99-103.

articulate themselves as part of a big, transcorporeal "we," who attune to and care because of being in and of the world together as (co)suffering human and nonhuman bodies, living in the risk zones of chemical modernity and postcolonial capitalism without any place to hide.

Against the background of these diffractions of my analysis through Haraway and Bellacasa, I shall also suggest that a large-scale enrollment of human and nonhuman cancerous bodies in a massive planetwide, corpo-affective kinship of embodied vulnerability is perhaps always already a way of making Anthropocene discourses and imaginaries "relationally unmade," that is, to reconfigure the human exceptionalist understanding of agency in which they are embedded. Transforming the position of enunciation and speaking not on behalf of, but from the messy transcorporeal, corpo-affectively grounded "we" experience of kinship within a huge planetary gathering of (co)suffering (non)human bodies, seem to be a way to resist the temptations of the discursive and imaginary construct of a "good" Anthropocene embodying a godlike human ability and savior-like will to produce feasible technofix solutions. In this gathering of (co)suffering bodies, the letting-die aspect of biopolitics/necropolitics is perhaps too deeply corpo-affectively experienced and painfully felt to be pushed aside, and the making-live dimension too abstract to gloss over the pain.

Finally, I shall ask how to avoid that the idea of a corpo-affective planetary kinship of transcorporeally (co)suffering (non)human bodies leads human imaginaries into the impasse of apocalyptic versions of the Anthropocene, to the popular "game is over" fantasies that Haraway warns against. How to think-feel-imagine cancer from the perspective of "the ruin that has become our collective home, home, hill collectively attending to and caring about "eruptions of unexpected liveliness"? Hy tentative answer is that Chthulucene cancer imaginaries must be considered as emergent, open-ended, and ongoing, unfolding in a diversified process of critical sharing of corpo-affective experiences of bodily vulnerabilities and collective coproductive work. This open-ended approach is the only way to transform these cancer imaginaries into critically affirmative worlding practices.

Haraway suggests science fiction and poetic work as one way of speculatively exploring such worlding practices and imaginaries. Therefore, I shall end with a poem spelling out my personal stakes and my version of the methodology of "shifting scales and registers," suggested by previous queerfeminist cancer culture research, ¹⁰² that is, zooming in and out between personal micro-levels and cultural-natural macro-levels, framing ethico-political and corpo-affective engagements on multiple, poetically linked levels. I find this methodology important for transforming cancer into a matter of care

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98. See Haraway, Staying with the Trouble, 50.
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^{99.} See Haraway, Staying with the Trouble, 3.

^{100.} Tsing, Mushroom, 3.

^{101.} Haraway, Staying with the Trouble, 37.

^{102.} Jain and Stacey, "On Writing about Illness," 10.

and for reconfiguring cancerous bodies as part of a planetary Chthulucene kinship of vulnerable, but cocreatively worlding bodies.

Anthropos and the Canary in the Mine

Excerpt from Lykke, Vibrant Death

Ι.

A human liver with a gigantic tumor about 20 centimeters in diameter—
massive areas of whitish cancer tissue have almost supplanted the lightbrown liver flesh. A cancerous liver, since 1961 stored as specimen in a transparent glass flask at the medical museum of the Charité hospital in Berlin.

2.

I visited the museum

right after your many hours long liver cancer operation at the hospital in the icecold winter of 2011. The previous year an 8 centimeter big liver tumor had been removed from your liver. We hoped that the cancer was stopped, but it relapsed within less than 12 months. Five new malignant tumors, spreading all over your right liver lobe were resected by doctors at Charité.

3.
The big liver tumor
from 1961
violently caught my gaze,
when I walked through

the exhibition halls of the museum, one day during the five weeks long time of waiting for you to recover enough to take the long car-ride with me back home to Denmark.

4.

I tried to keep the big tumor out of my field of vision.
I did not want to see it.
But the image
cut its way to my retina
in the second
which elapsed
before I could escape
to less terror-inducing
specimen showcases
of the museum.

5

Now several years after your death I return to Berlin. With irresistible force, the big liver tumor pulls me once more to the medical museum. The powers of horror of the enormous whitish mass with only a small rim of healthy light brown liver tissue around it interpellate me relentlessly. But I wander for hours through the streets of Berlin to find the museum, even though its whereabouts are clearly marked on all maps. I walk and walk. As in a nightmare which will not end the spell of the big tumor which has transformed

most of the light brown liver tissue into this scary whitish mass, attracts and repulses me, relentlessly.

6.

What does this tumor want to tell me?

7.

Finally there, for a long, long time I contemplate the showcase where the liver tumor looks back at me from its glass flask. I imagine the poor middle-aged guy who in 1961 the year when the Berlin Wall was built died from liver cancer at Charité, back then located in the city's Eastern, Soviet-governed zone. His tumor, now for years on display here, is bigger than yours ever were. But both of you are dead by now, through an odd kinship tie linked to each other, and to the many poor people, who back then as well as now, unheeded,

8.

die from liver cancer in Africa and Asia.

When the man from East Berlin died in 1961, liver cancer was the cause of 90% of all cancer deaths among Bantu people in Southern Africa, but made up only 1% of cancer deaths in the Western part of Europe, located so it, probably, could still be observed from the windows of the wards of Charité, just over there,

at the opposite side of the river Spree.

When the Berlin Wall was built soon after,
all the windows of the Charité
turning Westwards,
were walled up.

After this 'the West' could no longer be observed
by the patients dying
in the cancer ward of Charité.

Global liver cancer statistics tell me as a matter of fact which for me becomes a matter of concern and care, while I contemplate the big tumor, that it is risky to grow up in the wrong place.

IO. But you who grew up in the West also attracted liver cancer. Why? Noone knows . . . But as your oddkin in East Berlin whose liver tissue, transformed into cancerous tumor tissue killed him in 1961, you also lived for years behind the 'Iron Curtain' as an exchange student studying slavonic languages, and as a critical Western socialist curious to know what happened over there. In those years of your youth, you shared a bad food supply situation, with all those ordinary people in Eastern Europe, who did not belong to the Communist elite.

as one of your surgeons once suggested,

when pressed for an explanation of your cancer, perhaps, back then, contracted an unacknowledged hepatitis, later to become cancerous?

II.

Tracing the kinship ties which the big liver tumor in the museum prompted me to look for, I learnt that liver cancer, the cancer of the poor, grows so well in hepatitis scar tissue, is nourished by aflatoxin, a toxic component of Aspergillus molds, and develops due to opisthorchiasis, an infectious liver disease, caused by fish parasites, meticulously registered by WHO as "neglected tropical disease".

12.

There are no patient stories about liver cancers from the cancer wards in Botswana and Kenya, which I learnt about, when reading anthropological studies of cancer. Perhaps because hospital beds there, as the anthropologists tell me, are such a scarce resource, that only patients, whose cancers are still treatable, are allowed to occupy a bed at hospitals with free access. Patients, who can neither be treated, nor pay themselves for a hospital bed, are sent home to die. To die from liver cancer without morphine is very painful. According to statistics, 90% of the world's morphine

is consumed

by the 10% of its most privileged human inhabitants. 103

13.

Yvonne Rainer,

a US film director

whose breast was resected

due to cancer

shows her naked upper torso

in her film

"MURDER and murder." 104

It is filled with huge scars

after the mastechtomy.

Why did she get breast cancer?

Was it because she lived

in the part of the San Francisco Bay Area

which in the last decades of the 20th Century,

perhaps due to advanced kinds of chemical pollution,

had one of the highest breast cancer incidents in the world?

Noone knows.

Mainstream of cancer research

is meticulously investigating

the connection

between

cancer, genetics and lifestyles,

while pesticides

with endocrine disrupting carcinogens

such as glyphosate,

still have not been forbidden,

even though

science-activist alliances

for years

have pointed out

how vulnerable

to these substances

female breasts are.

14

Where do we go from here?

Should we believe

in a deus ex machina?

Jesus? A technofix?

A "good" Anthropocene?

103. Gunaratnam, Death and the Migrant, 15.

104. Rainer, MURDER.

Can we "win" the "war on cancer"?

Who is the enemy?

Aflatoxin, opisthorchiasis, hepatitis virus, glyphosate?

Or does the enemy live in ourselves?

In the idea of Anthropos,

behind whose mask Humanitas

is hiding,

Leonardo da Vinci's

Vitruvian Man,

the perfect human being,

the sovereign 'I',

who creates the world in His own image,

and who in detached loneliness

tries to decide

its fate?

15.

But what if Anthropos

alias Humanitas

gets cancer?

What if some of his cells

already are transforming into

wildly proliferating cancer tumors

that as uncontrollable tentacles

spread throughout his perfect body?

Cancer can be undiagnosed for a long time,

and Anthropos/Humanitas knows full well

how to shroud himself in epistemologies of ignorance.

"I brought a caged canary

with me to the mine,

to make sure that

I can always escape in time!

So perhaps the canary,

will get cancer.

But not me.

Not me!

Not me!

Not me!"

he shouts

incantatorily.

Do I hear a touch of fear

in your voice,

Anthropos/Humanitas?

when you so loudly deny

the relationship between

cancer, your body, our bodies, chemical modernity, and postcolonial capitalism?

Do you, in spite of your denials, deep inside, very secretly acknowledge that the day may come where you can no longer ignore the relationship, because the cancer grows wildly in your body?

16.

A vibrating gathering of planetary bodies brimming with vibrant life and dead embraces you. Listen to the calling of the canary. Let it out of the cage. Let it show you the way. Your shared body is bigger than the mine shaft. Let the canary show you what it wants. Be there for the canary, as it is there for you, a compassionate companion in life, in death, in what's in-between for both of you,

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- and for us all.

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