

# P·U·L·S·E

A HISTORY, SOCIOLOGY, & PHILOSOPHY  
OF SCIENCE JOURNAL

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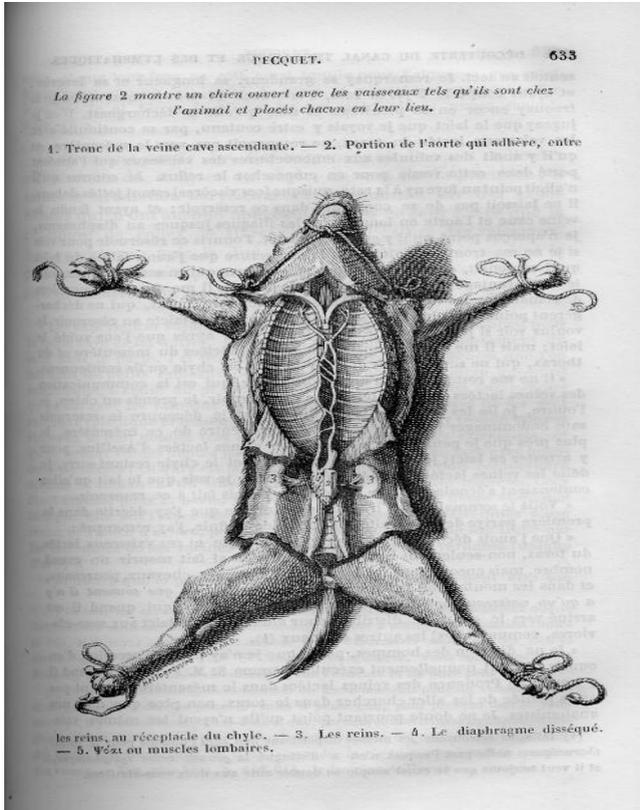
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# INTRODUCTION: LIFE AND METHOD

Claudia Alexandra Manta, Maria Temmes and Eva Zekany



*Dissected dog for the purpose of vessel investigations. Charles Daremberg.  
Histoire des Sciences Médicales. 1870. Vol. 2: 633.*

“[...] a reasonable rationalism must know to recognize its limits and to incorporate the conditions of its practice. Intelligence can apply itself to life only if it recognizes the originality of life”

Georges Canguilhem. “Introduction: Thought and the Living.” In *Knowledge of Life*. 2008. Ed. P. Marrati & T. Meyers. Trans. S. Geroulanos & D. Ginsburg. NY: Fordham University Press. pp. xx.

As the above illustration, included in Charles Daremberg's positivist history of medicine *Histoire des Sciences Médicales, Comprenant l'Anatomie, la Physiologie, la Médecine, la Chirurgie et les Doctrines de Pathologie Générale* (Paris, 1870), and accompanying 17<sup>th</sup>-century anatomist and physician Jean Pecquet's animal experiments promptly yet eloquently reveals, the gradual historical contouring of the organism as a conceptual repository and a methodological attitude, instrumental in non-reductionist approaches to the study of life and of the living, stands in the “foreground” of history and epistemology of the life sciences, and of biophilosophy, as a kind of (re)solution, precisely against a “background” of scientific and technological solidification, fixation, corseting, and eventual dismemberment of the precarious object of study. Is a crucified dog, transfixed onto the experimental setting and minimized into one element of the knowledge apparatus, next to the anatomist's hands, the moving scalpel, and the prestigious scientific journal, and whose “significance” is thus yet to be circumstantially determined, the same as the living, barking dog?

Neurologist Kurt Goldstein (1878 – 1965) advances, in his most representative work *The Organism: A Holistic Approach to Biology Derived from Pathological Data in Man*, what Oliver Sacks terms an “existential neurology” (1995: 12), and what I interpret as a preoccupation with epistemologically instrumentalizing a particular mystico-ontological conception of “life,” namely the irruption into the everyday technicalities of scientific conceptual frameworks and ways of practice of an intuitive grasping of the evidence of existence as a “meaningful” phenomenological totality: “We stand in the presence of a multiformity of material that is scientifically undefined. This material is simply the world around us, in which certain phenomena immediately stand out as “living,” without revealing to us the why and wherefore of this characteristic, or even challenging an inquiry concerning it. *Life confronts us in the living being*” (Goldstein 1995: 26). The project is not so much invested in offering a more correct scientific description of life, but in instrumentalizing a specific philosophy of the living for the purpose of vitalizing science.

Following in Goldstein's footsteps, historian and epistemologist of the life sciences Georges Canguilhem announces, on the one hand, the inextricable and irreversible intimacy between life and knowledge, and on the other hand, the possibility of an

epistemography (Peter Dear 2001) self-attuning to the conceptual and material dynamisms of its objects. “In biology [...] the issue is not using experimental concepts but experimentally constituting authentically biological concepts” (Canguilhem 2008: 6). “Biology must first hold the living to be a significative being, and it must treat individuality not as an object but as an attribute within the order of values” (Canguilhem 2008: 113).

The second volume of *Pulse: A Journal in History, Philosophy, and Sociology of Science* (2014) has been dedicated to such a careful consideration of the ways in which historically and socially situated practices, discourses, imaginaries, individuals and communities, and tools and objects of research constitutive of “sanctioned” or “to-be-sanctioned” forms of knowledge (particularly “science”) can be seen to have transformed our understandings of and interactions with the “living.” Moreover, in the process of reconceptualizing “life” in different contexts, at different levels, and from different perspectives, such epistemic enterprises find themselves profoundly transformed. The title of the volume is meant to capture this tensioned proximity between the “living” as both subject and object of knowledge, as a potentially inherent characteristic of knowledge processes: the “organicity” of knowledge revealed through a(n) (inter)disciplinary biography (an *epistemography*) centered on the problematics of the “nature,” and of the conditions of possibility, of analysis and of manipulability of the “living.” We have been interested in a genealogy of concepts of “life” (organic, socio-political, informational, technological, aesthetic etc.), and in how such inter/ disciplinary genealogies have contributed in turn to the emergence, erasure, preeminence or fading-into-the-background of specific disciplines, modes of inquiry, tools and habits of analysis, procedures of legitimization and invalidation characteristic of specific epistemic fields, either separately from each other or in functional congruence with each other.

Our new issue opens with a section on Literature, Science and Media. The articles share an approach to mediation as a technology of life, albeit from three very different angles. While the name of Bernard Stiegler is not mentioned explicitly in any of the articles, in a way they all pay homage to his understanding of technics and technology, as domains that can never be separated from life and humanity (or indeed its reverse, inhumanity). “All human action...is after a fashion *tekhne*” (Stiegler 1998, 94). All human life and ways of living are technologies, and all technology is mediation. In Keogh’s article, mediation comes into discussion as a traversal of discourse across disciplines, a flight of psychoanalytic discourse from its own niche into the midst of literary theory. But on a different level, it is about literature and the discourse of psychoanalysis as mediators of lived experience, as a technology of making sense of the self and others. Đurović shows how the scientific knowledge mediated by various instruments in the past has been *r*mediated through the lens of situated feminist epistemology, so as to produce an account of subject/object ontology that seems to prefigure Karen Barad’s agential realism – a performative account of lively and life-ly processes that transgress the boundaries between organic and inorganic, observer

and observed, life and technics. In Zekany's article, mediation signifies both a process of coemergence of user and technical medium, as well as a method of philosophical inquiry into discourses on media addiction.

The second section of the journal, "Medical Life Worlds", is dedicated to texts that consider how medical science and society interact. Both Kormos's article "The Homosexual as a Metaphor in Early AIDS Discourses" and Long's essay "The Biopolitics of Smallpox Vaccine Stockpiling and Distribution" raise important issues of how scientific research and social hierarchies based on, for instance, sexuality, race and gender can affect the ways in which scientific research is performed, monitored and understood in public discussion. Kormos's article offers an elaborative analysis on early AIDS discourse and how it changed the ways in which gay culture was approached. Long's essay, on the other hand, analyses how past medical experiments in the USA (such as the well known Tuskegee Syphilis experiment) have affected the vaccination policies that are planned in a fear of bioterrorism. Temmes' article "Systems Medicine and the War on Cancer – New Materialist Analysis," offers a slightly different viewpoint by focusing on examining how cultural metaphors, in this case the "war on cancer" discourse, can overrun the complexities of contemporary cancer research and treatment. While all these articles cover different cases, of different times and contexts, they all help to open up discussion around the intertwined existence of medical science and the world.

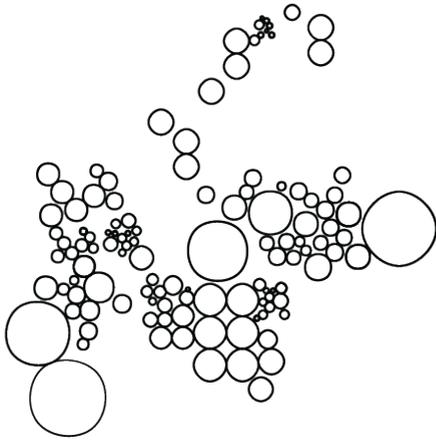
A third section is concerned with the converge of politics, life, and the technologies thereof, via classical theorists like Michel Foucault and Giorgio Agamben. Kulgbauer and Geisler's intensely theoretical piece covers the question of freedom and subjectivity as normative categories in Foucault's work, juxtaposing it with Agamben's distinction between bios and zoé. Cettl examines the metafictional setup of a biopolitical regime, and the way in which technologies of media are (or can be imagined to be) an essential and sustaining part of the apparatus that produces both grievable life and bare life.

We hope that the second issue of Pulse with its multiplicity in different approaches and viewpoints will help to unveil the diverse ways in which our theme "Life as Method" can be understood. Moreover, we hope that this versatility of topics will help you to get excited about different cases as well as the ways in which they raise up the interlinks between science and society. Finally, we would like to warmly thank all of our contributors that have made Pulse so vibrant this year.

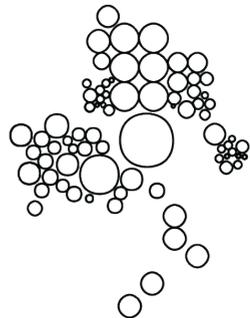
## REFERENCES:

- Canguilhem, Georges. 2008. *Knowledge of Life*. Ed. Paola Marrati & Todd Meyers. Trans. Stefanos Geroulanos & Daniela Ginsbury. NY: Fordham University Press.
- Daremborg, Charles. 1870. *Histoire des Sciences Médicales, Comprenant l'Anatomie, la Physiologie, la Médecine, la Chirurgie et les Doctrines de Pathologie Générale*. 2 Vol. Paris: J. - B. Baillière.

- Dear, Peter. 2001. "Science Studies as Epistemography." In Jay A. Labinger & H. M. Collins. (eds). *The One Culture? A Conversation about Science*. Chicago: University of Chicago Press. pp. 128-141.
- Goldstein, Kurt. 1995. *The Organism: A Holistic Approach to Biology Derived from Pathological Data in Man*. Forward by Oliver Sacks. NY: Zone Books.
- Stiegler, Bernard. 1998. *Technics And Time 1*. Stanford: Stanford University Press.



# LITERATURE, SCIENCE, MEDIA



# TELLING TALES AND CASE HISTORIES: USING NARRATOLOGY TO MAKE SENSE OF PSYCHOTHERAPY

Calvin W. Keogh

A century on from its emergence as an epistemic enterprise which radically reconceptualized human life and behavior, psychoanalysis is reportedly “dead or dying” as a viable theory and practice (Dufresne 2007, 7). Its relevance to psychiatry has been undermined by competing therapies and by advances in pharmacology and neuroscience, while its “question-begging traits” continue to be excoriated as “a scandal for anyone who subscribes to community standards of rational and empirical inquiry” (Crews 2000, 21-22). If psychoanalysis rose to eminence only to descend into a netherworld of pseudoscience—where it keeps company with other historically situated disciplines such as iridology and phrenology—it does maintain something of a second life in the humanities. According to a 2008 report by the American Psychoanalytic Association, its concepts are being applied in six times more courses by departments which concern “both the more traditional and the newer liberal arts areas” (400) than by departments of psychology, in which psychoanalysis is typically “mentioned dismissively”, if at all (392).

These findings are corroborated by Frederick Crews, who begrudgingly notes that psychoanalysis “finds itself in dire straits everywhere *but* among humanists and a minority of ‘soft’ social scientists” (2000, 20). An explanation for this might be traced to the ‘linguistic turn’ in philosophy, in the course of which language was denied its transparency and recast as a structuring agent which is implicated in any examination of what was hitherto apprehended as ‘reality’. Even as he was being denounced for his purported inadequacies as a scientist in the so-called ‘Freud Wars’ of the 1980s and 1990s, Sigmund Freud (1856-1939) was claimed by theorists such as Paul Ricoeur and Jürgen Habermas to be the “progenitor of the shift from an objectifying, empiricist understanding of the human realm to one stressing subjectivity and interpretation” (Robinson 1993, 14). Although he is otherwise widely regarded to have “fallen from grace” (Ibid., 1), the father of psychoanalysis succeeds in these terms as the purveyor of a particular brand of hermeneutics.

One of the more traditional areas in which psychoanalysis continues to be applied is literary studies, where it maintains its status as one of a number of select paradigms employed in the analysis of literary texts. This is understandable, given that language is central to the discourse and objects of investigation of both, and that the relation of the analyst to the messages of the analysand is “analogous to the literary critic’s

reading of the multiple levels of a text” (Loewenberg 2000, 99). That literature has often served not only as an object but as a model for psychoanalysis is evident in Freud’s appeals to classical and modern mythologies and in his style of exposition, for which he was honoured with the Goethe Prize in 1932. Recognizing a “fundamental congruence” between literature and psychoanalysis (Rickard 1994, 1), Peter Brooks envisions a mode of criticism which undertakes “to stage an encounter of [the two] that doesn’t privilege either term but rather sets them in a dialogue” (Brooks 1994, 22-23).

The following will attempt to stage such an encounter through the mediation of narratology. It examines the ‘case study’, a genre which is both a (hi)story and a type of (inter)disciplinary (auto)biography, in which the analyst engages in critical self-reflection while being involved in a broader consideration of the epistemology of human life and behavior. Freud’s study of ‘Dora’ in ‘Fragment of an Analysis of a Case of Hysteria’ (1905) is considered alongside a study of ‘Thelma’ in ‘Love’s Executioner’ (1989), one of a collection of ten ‘true stories’ by Irvin D. Yalom (b. 1931), each of which is intended as an exemplary representation of the theory and practice of an offshoot of psychoanalysis, existential psychotherapy. A narratological analysis is used to demonstrate how, in the process of conceptualizing their objects, objectives, and methodologies, the case studies undermine the reliability and applicability of the same through their own self-reflexiveness, which, ultimately, exposes the instability of the boundaries which demarcate science from science fiction.

## EXEMPLARY NARRATIVES

As a “dynamic approach to therapy which focuses on concerns that are rooted in the individual’s existence”, existential psychotherapy connects pathological behavior not to the early suppression of drives but to confrontations in “the future-becoming-present” of the patient with the “givens of existence”, namely death, freedom, isolation, and meaninglessness (Yalom 1980, 5-11). Influences include “humanistically oriented” European psychiatry championed by Rollo May (1909-94), the perennial tradition of existentialism in philosophy, and “the great writers” such as Kafka, Tolstoy, and Dostoevsky, who, “no less fully than their professional brethren, explored and explicated existential issues” (Ibid., 16-21). As noted by Yalom, many of the leading existentialist thinkers preferred literary exposition to formal philosophical argument (Ibid., 16). Exemplary fictions by Camus, Sartre, and others were instrumental in the popularization of existentialism and suggested a model which Yalom was to adopt with the publication of a series of novels: *When Nietzsche Wept* (1992), *Lying on the Couch* (1996), *The Schopenhauer Cure* (2005), and *The Spinoza Problem* (2012).

Before turning to fiction, Yalom published *Love’s Executioner and Other Tales of Psychotherapy* (1989). Although the collection is presented as a series of ‘tales’, it consists of ten “true stories” concerning former patients, whose names and

identifying characteristics have been altered in order to guarantee their anonymity (1989, x). Each was read in advance by its protagonist, who, “in the hope that the tale would be useful to therapists and/or other patients, gave [him] both their consent and their blessing” (Ibid.). In the introduction to an earlier theoretical work, *Existential Psychotherapy* (1980), Yalom had hoped to demonstrate, contrary to the assessments of other mental health professionals, that his was not a “muddled, ‘soft’, irrational, and romantic orientation” but one which was as coherent, rational, systematic, and effective as any of its rivals (Ibid.,5). Fulfilling the same purpose by complementary means, the later collection of tales provides an accessible representation of the theory and practice of existential psychotherapy in the form of a sequence of exemplary narratives.

As “true stories” of psychotherapy, Yalom’s tales bear comparison with the case histories composed at various intervals by Freud. In the first to be published, *Fragment of an Analysis of a Case of Hysteria* (1905), a similar concern is expressed for the protection of the patient’s identity with “guarantees of secrecy” (2001, 9). Like Yalom, who seeks both to defend his approach before his peers and to benefit other patients and therapists, Freud’s purpose is to substantiate his earlier conclusions by rendering his material “accessible to the judgement of the world” and, in so doing, to fulfil “his duties towards science [...and...] towards the many other patients who are suffering or will some day suffer from the same disorder” (Ibid., 7-8). His case history and the title story of Yalom’s collection, ‘Love’s Executioner’, both concern female patients: ‘Dora’, an eighteen-year-old whose neurosis derives from her psychosexual past, and ‘Thelma’, a chronically depressed and suicidal seventy-year-old, whose condition is grounded in her sexual and existential present.

As an exemplary narrative, the case history of Dora provides an opportunity for Freud to demonstrate the efficacy of various theories and practices. “[P]eculiarly well-adapted for showing how dream-interpretation is woven into the history of a treatment” (2001, 10), it is also suited to showcasing free association, a novel technique which has “completely revolutionized” psychoanalysis (2001, 12). Similarly, ‘Love’s Executioner’ begins as a representation of a therapy which is bound to be effective. Following two preliminary consultations and mutual assessments, the patient is committed to attend regular sessions with the therapist for a minimum of six months and to undergo a subsequent series of tests which are designed to measure the results. Pursuant to his “hope to demonstrate ... that it is possible to confront the truths of existence and harness their power in the service of personal change and growth” (1989, 15), Yalom outlines a strategy “to establish a close, meaningful relationship [with Thelma] as the solvent in which to dissolve her obsession” (1989, 24).

Neither Dora nor Thelma is an especially committed patient, the younger woman being obliged to attend by her father, the older resorting to Yalom only after some twenty years in alternative therapy. The example of each promises therefore to provide a neutral test case of their respective treatment. Dora terminates the

arrangement after less than three months, however, and, although he is confident that “we should no doubt have obtained the fullest possible enlightenment” had the sessions been allowed to continue, Freud acknowledges that he “can present only a fragment of an analysis” (2001, 12). Much against Yalom’s protestations, Thelma also decides to terminate her treatment and attends the outstanding contracted sessions reluctantly. In view of these outcomes and despite the intentions of their authors, it is questionable whether either of the narratives provides such an exemplary representation after all. The following proceeds from a narratological perspective to investigate how the respective therapies work and, in these particular cases, do not quite work out.

## MASTER NARRATIVES

According to Roy **Schafer**, “[i]t makes sense, and it may be a useful project, to present psychoanalysis in narrational terms” (1980, 30). Models of mental development are certainly amenable to classical definitions of narrative as a logically connected sequence of events (actions or happenings) which involve existents (agents or patients), while the increasing significance of narratology for psychoanalysis is evident in the development of cognitive and transmedial approaches which concern “mind-relevant aspects of storytelling practices, wherever—and by whatever means—those practices occur” (Herman 2007, 307). Schafer regards as “narrative structures” those “interpretive principles or codes” which have been employed by psychoanalytic theorists of different persuasions (1980, 29). What Yalom refers to in various terms as a “framework”, “paradigm”, “psychological construct”, or “theoretical structure” might be reformulated in Schafer’s terms as a ‘master narrative’ which, in providing a standardized system of explanation, allows the therapist “to make sense out of a large array of clinical data and to formulate a systematic strategy” (Yalom 1980, 26).

Like all psychodynamic therapies, existential psychotherapy owes its origins to Freud, at the core of whose metapsychology Schafer identifies two primary narrative structures (1980, 30-33). ‘Freud’s Beast’, a model of psychosexual development, traces the maturation of the individual through five stages—oral, anal, phallic, latency, and genital—in which the ego and superego supplement the id, which is tamed in a social environment hostile to its drives; ‘Freud’s Machine’, a model of mental functioning, presents the mind as a closed system or apparatus which contains an invariable quantity of energy and is motivated by force. Both of these narrative structures betray a reliance on Darwinian and Newtonian models and a resultant “thoroughgoing determinism” in which “[n]o room is left for freedom and responsibility” (Ibid.). Dissatisfied by this reductive and materialist determinism, certain followers of psychoanalysis searched for alternative models and, in the post-1945 intellectual climate, discovered one which allowed them to “construct a Freud who is [more] humanistic-existentialist” in orientation (Ibid.).

Philosophers of existentialism devised a variety of master narratives, examples of which include Kierkegaard’s model of enlightenment from the aesthetic through the

ethical to the religious stage, the will to power of Nietzsche's *Übermensch*, and the absurd labors of Camus' Sisyphus. The basis of the narrative of human development propagated by Sartre is that existence precedes essence: Man does not choose to be born into the world but nonetheless emerges to encounter himself there; abandoned by God and condemned to be free, his essence is constituted by the choices he makes and for which he alone is responsible; burdened by anguish and despair, there are some who succumb to bad faith while others affirm their condition and realize an authentic life. Translated into the terms of a master narrative of existential psychotherapy, pathology consists in "anxiety and its maladaptive consequences", or in the defense mechanisms or symptomatic responses of the patient who is overwhelmed by the "ultimate concerns" of human existence (Yalom 1989: 485).

"Once installed as leading narrative structures", according to Schafer, the master narratives of psychotherapy "are taken as certain in order to develop coherent accounts of lives and technical practices" (1989, 30). In the 'Prefatory Remarks' to his case history of Dora, Freud asserts that the causes and symptoms of hysteria originate in "the patient's psycho-sexual life [and] are the expression of their most secret and repressed wishes" (2001, 7-8). Similarly, Yalom's 'Prologue' systematically accounts for each of the four "ultimate concerns" as they apply to the individual cases: his patients "feel their lives to be senseless and aimless" (1989, 12), love and sex are used to ward off isolation and "approaching death" (1989, 6), and the entire course of Thelma's therapy revolves around attempts "to help her reclaim her power and freedom" (1989, 7). Rather ironically, just as the 'Prefatory Remarks' and 'Prologue' precede the case histories, the master narratives of psychoanalysis and psychotherapy constitute conceptual essences which precede and always already condition the clinical existence of the patients.

When analysis is regarded in narrational terms, or on the basis of one of any number of interpretive codes, it must be accepted that "there are no objective, autonomous, or pure psychoanalytic data which ... compel one to draw certain conclusions" (Schafer 1980, 30). Yalom concurs implicitly with this, affirming that he presents "*a* paradigm, not *the* paradigm" of psychotherapy (1980: 26). According to him, all existential analysts agree on one fundamental point: that the "proper method" is the 'phenomenological' one, which "by definition is non-empirical" (Ibid. 24-25). Urging the therapist to "understand the private world of the patient" and to attend to their experiences "without 'standardized' instruments and presuppositions" (Ibid.), he suggests that, ultimately, the existential paradigm "can be justified only by its clinical usefulness" (Ibid., 486). Despite this disclaimer, it is clear from the 'Prologue' how the data of each case are conceptually anticipated. The following considers the actual sessions between patient and therapist, in order to judge whether the paradigm receives its justification or not.

## ANALYTIC NARRATIVES

If the master narratives of existentialist philosophy apply to what might be termed the micro-narrative of the individual life, those of psychoanalysis and psychotherapy are applicable to the narrative situation of the dialogue between patient and therapist. In *Existentialism and Humanism* (1946), Sartre relates the story of a pupil who came for advice on whether to stay and console his mother or to avenge his slain brother by joining the *Résistance*, a decision which will determine what he makes of his future (35). Predictably neutral in his response, Sartre assumes a role analogous to that of the existential psychotherapist, whose function toward the patient is to catalyze their will to act and to engage effectively in life. If the authenticity of the young man's existence can be read in an autobiographical narrative which is consistent with responsible choice, the mental health of the patient who undergoes therapy consists in the correction of the "faulty narrative" of neurosis into "a coherent life story" (Brooks 1994, 49).

Brooks has noted an "increasing agreement ... that psychoanalysis is a narrative discipline [which] at least implicitly displays the principles of its own 'narratology'" (1994, 47). In classical structuralist narratological theory, the basic and necessary components of a 'narrative text' are situated on two levels: those of *story*, or underlying content, and *discourse*, the means and manner in which that content is structured and communicated. Translated into these terms, the telling by the analysand is an incoherent discourse which is decomposed to its underlying story by the analyst, who then recomposes and retells it as a coherent discourse, which is in turn reiterated by the analysand. The work involved in the analytic dialogue might be said to constitute both a narrative situation and a hermeneutic cycle. As Brooks warns, the narrative is "not simply 'there', waiting to be uncovered" (1994, 55) but comes into being through hypothesis or "interpretative construction" which, in a "dynamic interaction of the teller and listener" is ongoing and potentially interminable (1994, 50).

In 'Love's Executioner', Thelma recounts how she and one of her former therapists had met casually after the termination of her treatment and begun an affair which was eventually ended by him abruptly and without warning. Now, although her "life is being lived eight years ago" (1989, 21), she is convinced that recovery is possible if she is only offered an explanation and allowed a minimum of continued contact, even to the extent of a five-minute telephone conversation per year (1989, 27). From Yalom's perspective, Thelma's discourse is a deluded romance which, on the basis of its underlying story, is recomposed by him into a discourse of seduction by an unprofessional therapist (1989, 22-23). Convinced, however, that her faulty and incoherent narrative obscures the true causes of her depression, he purposes to convince Thelma that Matthew was never in love with her so that she can begin to establish a more authentic basis for living her life after a more fundamental existential despair has been exposed.

Having diagnosed her obsession according to the master narrative of existential psychotherapy as "an old woman's irrational but sustaining ... love illusion" (1989,

14), Yalom persists in trying to convince his patient that the love she experienced never occurred. Like Dora, who disagrees with Freud's analysis of her childhood experiences, Thelma "never found this thesis persuasive" (1989, 32). According to Brooks, the earlier case history indicates the discovery by Freud that "the relation of teller to listener is as important as the content and structure of the tale itself" (Brooks 1994, 50). Although transference involves "an uneasy dialogue" (Ibid., 61), it is a "productive encounter" in which the analyst "renounces the totalitarian foreclosure of interpretation and meaning" (Ibid., 71-72). Freud notes that "the factor of 'transference' ... did not come up" during his treatment of Dora (2001, 13), and the same is true of Yalom's treatment of Thelma, who "would not, for example, relate to [him]" (1989, 11) and "gave no evidence of wanting a response" from him (1989, 25).

Far from being productive, the encounter between Thelma and Yalom becomes deadlocked to the extent that they "might as well have been in separate rooms" (Ibid.). As is the case with Dora and Freud, the narrative situation remains that of a story over which two mutually exclusive discourses fail to compromise. Yalom does not question the adequacy of his own narrative and, rather than engaging with his patient 'phenomenologically', as should "every good therapist", with "empathy, presence, genuine listening, [and] non-judgmental acceptance" (1989: 25), assigns her intransigence to 'resistance' and considers, moreover, that "much wonderful therapy may be wasted on a patient" (Ibid., 36). He becomes increasingly discouraged and exasperated, realizes that "all [his] strenuous efforts had been ineffective", and feels compelled to resort to a desperate measure (Ibid., 45). Assuming that his reputation will intimidate Matthew into cooperating, Yalom proposes that Thelma's ex-lover be invited to the sessions, only to discover that his patient has pre-empted him and arranged a three-way meeting on her own initiative.

In narratological terms, Yalom's intention in summoning Matthew is to force a change in both the focalization and the homodiegetic narration of Thelma's discourse. The question-and-answer format he arranges for the session imposes the most controlled method possible of aligning the story with his own recomposition of her discourse from a heterodiegetic and implicitly omniscient perspective. Much to his surprise, however, he is "not remotely prepared" for Matthew's version of the narrative (1989, 53), which appears to confirm Thelma's and to justify her 'resistance'. Yalom finds himself profoundly "dislocated" in the event (1989, 54). "As with reader and text", as Brooks notes in reference to the case history of Dora, "there is no clear mastery, no position of privilege, no assurance ... that the analyst and the analysand won't trade places" (1994, 58). That the patient and therapist *do* trade places will be suggested next, as we return from the narratives of the analytic dialogue represented in 'Love's Executioner' to the narration of the tale itself.

## UNRELIABLE NARRATIVES

According to the conventions of the analytic dialogue, Thelma's narrative role is predetermined. Once the analyst has decomposed the faulty narrative to its underlying story, the content becomes "illustrative of an unrecognized ... set of attitudes ... held by the analysand, who is shown to be an unreliable narrator in respect to the consciously constructed account" (Shafer 1980, 43). As things turn out, Yalom's patient is less an unreliable narrator than a narrator who is not relied upon. Like Dora, whose narrative of sexual abuse is corroborated when she confronts Herr K., Thelma is vindicated when, in answer to her direct questions, Matthew reveals that he had "felt [as] one with [her]" (1989, 53) and that it was on the advice of *his* therapist that he had ceased all communication. Thelma's apparently absurd solution to her obsession is also vindicated: after a period of cooling off, she contacts Matthew again and the former lovers arrange between themselves to meet regularly in future.

Conventional roles are reversed in the therapeutic encounter between Thelma and Yalom. The patient has become her own analyst and the analyst his own patient, an unreliable narrator who espouses a "delusional system, working toward the construction of fictions that can never be verified other than by the force of [their] conviction" (Brooks 1994, 60). If Thelma's 'resistance' is such as to prevent transference, Yalom's frustration produces a counter-transference which, as Schafer observes, always results in incoherence on the part of the analyst, whose "retellings themselves become unreliable and fashioned too much after the analyst's own 'life story'" (1989, 43). Yalom invests disproportionate energy in trying to convince Thelma and adheres to an unreasonable refusal of her narrative which in itself amounts to resistance. Increasingly resentful of the "hard and unrewarding work" (Ibid.), he feels "baffled and rejected" (Ibid.), hears only "[m]ore and more" criticisms of therapy (Ibid., 45), and comes to the conclusion that "powerlessness was the problem in [his] therapy with Thelma" (Ibid., 35).

The question of Yalom's reliability as one of two narrators involved in the analytic dialogue extends to his role as sole narrator of the text in which that narrative situation is embedded. As is the case with the history of Dora, which according to Freud's own admission "was only committed to writing from memory" (2001, 10), Yalom's account is subject to the vicissitudes of selection and representation which are characteristic of any retrospective report. Like Freud, he is now a homodiegetic narrator whose focalization shifts between two perspectives, those of immediate involvement and of "personal reflections post hoc" (1989, x). If the first is overtly subjective and tendentious, the reliability of the second is equally questionable. Although he admits to having "botched [the] case" he had accepted unhesitatingly (1989, 65), Yalom concludes that he "had disregarded twenty years of evidence at the outset that Thelma was a poor candidate for psychotherapy" (Ibid.), thus shifting the blame to the selection process and from the therapist back to the patient.

Yalom justifies his claim by asserting that he had been "[s]wept along by hubris" (Ibid.), echoing an observation made by him in his prior account of accepting

Thelma's case (Ibid., 29). Those parts of the narrative which are focalized through his "personal reflections" are simultaneously predictive and retrospective and sustain the concept of 'hubris' as a unifying theme which, subscribed under his self-conscious metaphorical role as "love's executioner", is carried over to another level of discourse: that of the literary. Although each of Yalom's patients approved of their representation in his collected tales, some decided that "the disguise was unnecessarily extensive" or were unsettled by "dramatic liberties", while Yalom himself concedes that he "often made symbolically equivalent substitutes" and that the "dialogue is [often] fictional" (1989, x). In a complex series of layers, the narrative situation of the analytic dialogue, which already embeds a master narrative, is embedded in the narrative of a case history, which is itself embedded in the discourse of a literary narrative.

Although he makes a point of deflecting any such interpretation, Freud is aware that the case history of Dora might be read (or written) by the physician "as a *roman à clef* designed for their private delectation" (2001, 9). That he is "a writer of fiction" might be a polemical claim, but there is some truth in Crews' observation that his writings "achieve a poetical density of texture by abolishing the boundary we might expect to find between the honest investigator's fantasy life and the material he is trying to explain" (2000, 29). 'Love's Executioner' similarly shifts generically between "true stories" and "tales" and in epistemic position and ontological status between fact and fiction. The literary qualities of its surface—apparent in variations of focalization, techniques of characterization, and deployments of symbol and metaphor—penetrate to a deeper level in the structure of the text, where a plot is developed according to a classically conventional scheme of exposition, crisis, denouement, and resolution.

Like the case history of Dora, 'Love's Executioner' establishes a 'clinical picture', progresses to a crisis in the struggle over narrative meaning, and culminates in the patient's delivery of "the ultimate riposte ... of refusing to tell further" (Brooks 1994, 57). Although the outcome in neither case reflects well on the therapies represented, both histories are resolved. Freud learns about Dora's improvement, which he immediately identifies with "the effects of [his] treatment" (2001, 120), attributing his earlier failure to little more than an untimely omission of information concerning her homosexual love for Frau K. The final report on Thelma's case praises her therapist's work for its effectiveness and concludes that, "*as a result of [her] therapy, [she has] improved significantly*" (1989, 66; emphasis added). For Yalom, however, this offers "little comfort" (Ibid., 67). What his tale arguably provides is only further proof of the self-validating "science fiction" (Crews 2000, 24) which fuels the censure of certain psychotherapies and undermines their claims to be regarded as anything other than pseudoscientific enterprises.

## CONCLUSION

While the status of psychoanalysis has been radically undermined in the fields of psychiatry and psychology, it retains viability in the humanities as a distinct variety of hermeneutics. As suggested by Brooks, literary critics who appeal to psychoanalysis as an authoritative interpretive paradigm might do well to involve it with literature in ways which avoid the privileging of either term. In the staging of such an encounter, narratology can usefully serve as an intermediary by providing both a framework and a set of analytical tools. If Crews disparages the “devolution of psychoanalysis from science to hermeneutic to mere occasion for ‘narrative truth’” (2000, 30), other critics have been more constructive in recognizing and theorizing the same shift in focus. Schafer presents psychoanalysis in explicitly narrational terms, regarding its interpretive codes or principles as “narrative structures” (2000, 29), while Brooks presents it as a narrative discipline which, in the encounter between analyst and analysand, implicitly displays the principles of its own ‘narratology’ (1994, 47).

The foregoing analysis of Yalom’s ‘Love’s Executioner’ and Freud’s ‘Fragment of an Analysis of a Case of Hysteria’ demonstrates the pertinence of the ‘case study’ genre to a balanced encounter between literature and psychoanalysis. As Peter Loewenberg observes, Freud’s case histories are more likely to feature in literary than in psychology studies and read less like clinical texts than “the best fiction” (Loewenberg 2000, 97). Approached through the mediation of narratology as exemplary narratives intended to represent the theories and practices of their respective psychotherapies, the case histories of Dora and Thelma are representations of failed treatments, which can be problematized through the application of models of narrative types and types of narration. The ultimately unreliable and self-validating discourse which is applied by Yalom both in therapy and in the representation of that therapy deploys strategies of focalization, metaphor, symbolization, and plot resolution which, like those of Freud, slip from the clinical to the literary and from fact to the threshold of fiction.

The application of a narratological framework provides an insight into the functioning of psychotherapy as a subjective and interpretive rather than objective and empirical epistemic enterprise. The representation of treatment according to classical plot structures is expressive of a fundamental desire for cure through narrative coherence as well as being a reflection of Brook’s “aesthetic conception of psychoanalysis”, with its emphasis on “formal properties of narrative, its coherence, completion, and rhetorical force” (Rickard 1994, 12). According to Harold Schweizer, this conception “leads necessarily to the admission that psychoanalysis is not really different from literature” (Ibid.). Although this is perhaps an exaggerated claim, it is indicative of a fundamental connection, not least on the level of narrative structure and strategy, which “leaves open the possibility for a correspondence between the two discourses where neither is dominant” (Ibid.). In the field of literary studies, this suggests the existence of an already firm basis for establishing and maintaining a more

balanced dialogue and non-privileged interrelation between literature and psychoanalysis.

## REFERENCES

- Brooks, Peter. 1994. *Psychoanalysis and Storytelling*. Oxford: Blackwell.
- Crews, Frederick. 2000. 'Unconscious Deeps and Empirical Shallows'. In: Peter Brooks & Alex Woloch, eds. *Whose Freud? The Place of Psychoanalysis in Contemporary Culture*. New Haven, CT: Yale University Press.
- Dufresne, Todd. 2007. *Against Freud. Critics Talk Back*. Stanford, CA: Stanford University Press.
- Freud, Sigmund. 2001. 'Fragment of an Analysis of a Case of Hysteria'. [1905]. In: James Strachey, ed. *The Standard Edition of the Complete Psychological Works of Sigmund Freud*. Vol. VII. London: Vintage.
- Herman, David. 2007. 'Storytelling and the Sciences of Mind: Cognitive Narratology, Discursive Psychology, and Narratives in Face-to-Face Interaction'. In: *Narrative*. 15 (3): 306-34.
- Loewenberg, Peter. 2000. 'Psychoanalysis as a Hermeneutic Science'. In: Peter Brooks & Alex Woloch, eds.
- May, Rollo. 1958. 'The Origins and Significance of the Existential Movement in Psychology'. In: Ernest Angel & Henri F. Ellenberger, eds. *Existence: A New Dimension in Psychiatry and Psychology*. New York, NY: Basic Books.
- Redmond, Jonathan & Michael Shulman. 2008. 'Access to Psychoanalytic Ideas in American Undergraduate Institutions'. In: *Journal of the American Psychoanalytic Association*. 56 (2): 391-408.
- Rickard, John S. & Harold Schweizer. 1994. 'Introduction'. In: Brooks.
- Robinson, Paul. 1993. *Freud and His Critics*. Berkeley, CA: University of California Press.
- Sartre, Jean-Paul. 1980. *Existentialism and Humanism*. [1946]. Philip Mairet, trans. London: Methuen.
- Schafer, Roy. 1980. 'Narration in the Psychoanalytic Dialogue'. In: *Critical Inquiry*. 7(1) 'On Narrative': 29-53.
- Yalom, Irvin D. 1980. *Existential Psychotherapy*. New York, NY: Basic Books.
- Yalom, Irvin D. 1989. *Love's Executioner and Other Tales of Psychotherapy*. New York, NY: Basic Books.

# WHAT THE TELESCOPE CAN TELL US ABOUT POSTMODERN THEORY

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“No one ever accused the God of monotheism  
of objectivity, only of indifference.”  
(Haraway 1988, 587)

Donna Haraway (1988) in her text “Situated Knowledges: the Science Question in Feminism and the Privilege of Partial Perspective” suggests a novel epistemological positioning in natural, human and social sciences—a quest for feminist objectivity based on limited location and situated knowledge (583). This kind of objectivity is supposed to produce a new kind of knowledge based on self-reflexivity and avoidance of the subject/object split—knowledge that makes the knower answerable for the way (s)he ‘sees’ (ibid.). What is particularly interesting in Haraway’s argument is that by trying to overcome the *episteme* of ‘objectivity’—which she humorously describes as imagined like an “invisible conspiracy of masculinist scientists and philosophers”—she develops a critique of postmodern theory and standpoint feminism<sup>1</sup> (575). Such rhetorical move in her argumentation shows not only that the ‘objective’ *episteme* has been shaped throughout history by different scientific and philosophical discourses, but also that some epistemological shifts in science and philosophy can be compared in terms of their *radicalism*.<sup>2</sup>

Objectivity, as explained by Haraway, takes on a task of ‘conquering gaze’ that entitles the ‘unmarked’ category—positions of Man and White—to claim power and represent while escaping representation (1988, 581). As opposed to this ethical, political and epistemological practice, Haraway comes up with the solution that brings together subjects/objects of knowledge, their locations, responsibilities and historical accounts of the knowledge production. In this sketching of Haraway’s arguments, two things are important: the scientific/philosophical ‘objective’ *episteme* (including criticism of the same) and the contradictory position of the feminist situated objectivity. Haraway’s article can serve as a frame for shaping and comparing through

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<sup>1</sup> Haraway names the dichotomy different than this. She calls it “a dichotomy which Harding describes in terms of successor science projects versus postmodernist accounts of difference and which I have sketched in this essay as radical constructivism versus feminist critical empiricism” (Haraway 1988, 580). Nevertheless, it is obvious through reading of her text that she criticizes deconstructionist tradition of postmodern theory as well as standpoint feminism.

<sup>2</sup> ‘Radicalism’ is in this paper used as analytical tool for marking epistemological shifts. I will explain this in more detail further in the paper.

the ‘mediological’<sup>1</sup> *episteme* some aspects of the 17<sup>th</sup> century experimental empiricism and postmodern theory/philosophy.

In marking epistemological shifts here, I rely on disciplinary notions and methods of historians of science, for I want to pursue the “epistemology in the making” (Daston 2009, 810): explaining what I assume by indicating certain shifts in epistemology and how those shifts can be articulated today.<sup>2</sup> However, my intention goes beyond locating shifts and aims at mapping sites of comparison between them. By approaching history of epistemology in such manner, I want to outline some patterns of repetition which, nevertheless, go against the idea of linear and progressive historical development of ideas. In that regard, this paper explores how tensions between postmodernist radical constructivism and feminist situated epistemology resemble tensions in the 17<sup>th</sup> century around which various scientific debates emerged. Moreover, this paper seeks to point to some similarities and paradoxes these shifts reveal, as well as to present them via different interrelations that can be interpreted as bases for the emergence of another shift—feminist epistemology.

Feminist epistemology is important here not only because it fundamentally relies on the criticism of other epistemological realms, in this case radical constructivism, but also because it always *goes back* to the starting point of its knowledge production, building its insights on the counts of the notions/theories it criticizes. In this way, the feminist epistemology itself offers a certain level of repetitiveness which, at the same time, explains on a meta-level the very embeddedness of this paper in the feminist theoretical background. Experimental empiricism—located in a period of debates over the invention of the telescope—in this paper represents the first shift. The second one is recognized in the “linguistic turn” located in theory/philosophy of deconstruction that, according to some theorists, initiated the “turn”. Finally, Haraway’s proclamation of the feminist objectivity situated in partial perspectives represents the last of the shifts to be analyzed here for, as I will show in this paper, she suggest the *medium* not replacing the subject of the knowledge production, but rather indicating the way the subject produces the knowledge in the first place.

## HERALDS OF THE RADICAL INSTRUMENTALISM

Historians today interpret the view about the 17<sup>th</sup> century science, as we know it today, like the reflection of the official self-presentation of Royal Society of London on the one hand, and as imparted by the historiography of our time on the other (Wolfe and Gal 2010, 1). This science is grounded on empirical inquiry as an open, collaborative experimental practice, mediated by specially-designed instruments, stressing accuracy and replicability (ibid.). In his text about the metaphysics of

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<sup>1</sup> This term is taken from Hartmut Böhme’s text about the metaphysics of the scientific objects of 17<sup>th</sup> century science which was conducted exclusively through instrumental experiments (2005). I will be discussing more about this *episteme* in the following pages.

<sup>2</sup> Lorraine Daston explains the task the history of science by indicating their challenge “to explain how local knowledge [...] became universal science, that is, how context eventually erased itself” (2009, 807-8).

In 1610, a decade after introducing the telescope, Galileo writes instructions for its use, in which he ascribes the instrument a very radical status: namely, that it does not assist or improve the human eye—it replaces it. (ibid., 123). This proclamation triggered a heated reaction from Jesuits, who intended to give the instrument a more traditional role. The tension escalated in a very surprising way, Gal and Chen-Morris conclude, because Galileo was the one who attacked the Jesuit mathematician Horatio Grassi for the claims that seem, if nothing, like acknowledging Galileo’s contribution to astronomy (ibid., 124-5). Grassi had written a scholarly discussion about the appearance of the sequence of three comets in the European sky during the 1618 in which he, among other things, pays tribute to Galileo and his instrument (ibid., 123-4). Despite this, Galileo joins the discussion by attacking Grassi’s justification of the method of observational astronomy—*parallax calculations*—and his belief in the power of the human eye, hence observational experience. Gal and Chen-Morris point out the purpose of Galileo’s assault: “Galileo does not defend the value of the telescope, which Grassi, we saw, has never doubted. Galileo takes the opportunity of the discussion about comets to pursue his (and Kepler’s) new empiricism, in which instruments are to replace the human senses” (125-6).

This debate shows the political value the instrument plays in Galileo’s argumentation of empiricism, in a sense that it legitimates the standard of trustworthiness of an ‘objective’ perspective. Nevertheless, legitimate ‘objective’ perspective comes along with the power that is to be revealed in science’s subsequent development. By bringing in light as a fundamental element that eliminates the role of the eye and accepting empiricism as a valid approach only when mediated through the instrument, Kepler and Galileo contributed to legitimization of the scientific ‘objective’ perspective. More importantly, they introduced abstract, mathematical language as another mediator of the nature, the one that “re-construct[s] observed reality so it can be approached by reason, through the instrument” (ibid., 143). However, there is more at stake here than labeling one “side” of the debate (and debates rarely have two sides), “Jesuit”. I am attempting to depict the displacement of the eye by the instrument as “radical” or “threatening” precisely because it dispenses, theoretically at least, with (human) *interpretation*.

This leads us to Haraway in the 20<sup>th</sup> century and her re-placement of the ‘objective’ *episteme* in the limited and situated position of interpretation. As I will show in following pages, Haraway’s inquiry sees the ‘mediological’ *episteme* which is based on technology, such as, for instance, the telescope, not as threatening to human’s *interpretation*, but rather necessary for learning how to make a human *interpretation* more *precise*—in a sense recognizing the steps/levels of knowledge production, hence recognizing their possible limits. Before linking this shift to Haraway’s theoretical realms, I will introduce a concept of ‘radical constructivism’ which she uses to show and subvert principles of the knowledge production based on the subject/object split.

## INTRODUCING RADICAL CONSTRUCTIVISM

The “linguistic turn” in philosophy represents an epistemological shift that re-shaped not only Western philosophy of the 20<sup>th</sup> century, but also a wider range of human sciences: from literary theory to sociology, anthropology, psychoanalysis and history. This shift introduces a new way of thinking, one that focuses on the relationship between meaning and language. According to some theorists, “linguistic turn” in postmodern theory was initiated with Jacques Derrida’s theory of deconstruction (see Kates 2008, Punday 2003). The theory of deconstruction is a wide, complex and contradictory field of philosophical inquiry, which in this paper will be introduced in a simplified manner. I am interested in emphasizing the *radicalism* of the shift it initiated, as well as in its subsequent legacy which developed either towards rejecting or moving beyond deconstruction.

Deconstruction is a technique of reading texts, an activity of reading, a philosophical approach that discloses paradoxes of Western philosophy and culture. It grounds on many postulates such as ideas about the *metaphysics of presence*, *logocentrism*, binary oppositions and *différance*. Derrida writes about *metaphysics of presence* as a fundamental misapprehension of Western philosophy/culture—the idea that meaning reveals itself in its ‘pure presence’, hence the structure of the meaning relies on a presumed center, a locus of presence (Derrida 1978, 1-2). That following, he introduces a new paradigm described as emergence of the ‘event’ in the history of the word ‘structure’—or a ‘structurality of a structure’—deemed as precedent for understanding history of the Western human sciences as “a series of substitutions of center for center” (*ibid.*, 2). He furthermore explains:

From then on it was probably necessary to begin to think that there was no center, that the center would not be thought in the form of a being-present, that the center had no natural locus, that it was not a fixed locus but a function, a sort of non-locus in which an infinite number of sign-substitutions came into play. This moment was that in which language invaded the universal problematic; that in which, in the absence of a center or origin, everything became discourse – provided we can agree on this word – that is to say, when everything became a system where the central signified, the original or transcendental signified, is never absolutely present outside a system of differences.

(*ibid.*)

This “moment in which language invaded the universal problematic”, calls upon another set of Derrida’s discernible techniques: interplay of presence and absence or notions of *logocentrism* and *différance*. Specifically, *logocentric* tradition of the Western thought assumes the preexistence of the idea/meaning that finds its appearance first

in speech and then gets transcribed into writing (Belsey 2002, 80). Following Ferdinand de Saussure's claim that meaning exists only as the effect of a signifier, Derrida concludes that there can be no transcendental meaning, for it is always an effect of the language (*ibid.*). If *logocentrism* assumes a metaphysical presence, Derrida's *différance* is what implies a metaphysical absence in writing/language. In this sense, meaning is constituted through reiterating sets of differences—in terms of interaction of presence and absence—where one signifier/term/notion/word cannot be excluded from the meaning of its opposite (see Belsey 2002, Derrida 1997). These binary oppositions are the core of the Western philosophy/culture, and together they construct meaning by supporting its absent antithesis (e.g., nature/culture) (see Belsey 2002). Derrida's *groundbreaking* theory/philosophy of deconstruction not only initiates the premise of 'reality' knowable only as mediated through language, but it also announces the belief in uncertainty of the very language that constitutes our meaning/knowledge.

## **MAPPING THE 'MEDILOGICAL' EPISTEME**

It seems rather indicative that some of the predecessors of the deconstructionist line of thinking about language derived their hypothesis from sciences like mathematics. I refer here to writings of Gottlob Frege, analytical philosopher to whom theorists ascribe the initiation of the "linguistic turn" in philosophy. Joshua Kates, for instance, links Frege's philosophy of language directly to some aspects of Derrida's and Foucault's deconstruction (see Kates 2008). By introducing the 'context principle'—accessing the meaning of the word through the way it is used in the sentence—Frege creates a space for thinking about *speech* and *discourse* (*ibid.*, 80-1). By making this connection, Kates suggests Frege's influence on what he defines as two types of deconstruction—one of *sense* and other of *reference*—seen as Derrida's and Foucault's postmodern legacy (*ibid.*, 78-9). By bringing Frege into play here, I seek to create a space for tracing parallels between 17<sup>th</sup> century scientific paradigm and postmodern philosophical language/meaning inquiry.

One could then say how Frege's mathematical analysis of the sentence structure (that parts of sentences that have a job of referring to individuals are represented through a variable and the rest of the sentence as functions ranging over them) resembles scientific desire to legitimate experimental findings through a mathematical language—something recognized in Galileo's and Kepler's efforts in 17<sup>th</sup> century astronomy. Frege's distinction between the reference and the sense, as well as Saussure's recreation of the notion of reference in language, created grounds for the final act of language in creation of 'reality' and 'meaning'. This "language of words" that deconstruction reveals introduces a new paradigm: "Language or discourse thus does not have to refer in order to have a meaning, a stance that obviously makes apparently non-referential uses of language." (Kates 2008, 84).

If everything we know is accessible only through language, and hence language does not have to refer to 'reality' in order to have a meaning, then language as a

phenomena in scientific experimental empiricism, Hartmut Böhme introduces the concept of ‘mediological’ *episteme*—sensory representations of scientific objects, created in media-based experimental situations which became “models of an *episteme* that operates through media” (2005, 363). According to this *episteme*, Böhme identifies four fields of scientific objects which he finds crucial for the birth of the ‘new science’: human anatomy, mathematical astronomy, microscopic botany and zoology, and pneumatic-hydraulic experimentations of Newtonian mechanics (ibid.).

I will focus here on the domain of mathematical astronomy, because the invention of the telescope opened a new space for debating a desire for (controlling) knowledge. More specifically, my intention is to emphasize the outcome of debates around the invention of the telescope—between Galileo and Kepler on the one side, and Jesuit mathematicians on the other. The newly invented optical instrument allowed a possibility of peering into the most far (telescopic) or smallest (microscopic) spheres of nature and was meant to answer fundamental questions and resolve cosmological riddles, as Ofer Gal and Raz Chen-Morris describes it (2010, 121). In the text “Empiricism Without the Senses: How the Instrument Replaced the Eye”, Gal and Chen-Morris write about the epistemological shift initiated by Kepler’s and Galileo’s writings about the instrument’s features. There are two things important here: Kepler’s and Galileo’s novelties in approaching astronomy and optical instruments, and debates provoked by the radicalism of these novelties.

Five years before Galileo’s advent of the telescope, Kepler introduced the public to his instrument – the *camera obscura* – which demonstrated that the image constructed through it is the very observed object (ibid., 134). Nevertheless, this was not the origin of the novelty:

Neither the phenomenon of pinhole images, on which the camera obscura is based, nor its account in terms of intersecting rays is new to the optical tradition. [...] Kepler’s novelty is in setting the stage to the radical instrumentalization of observation he would share with Galileo by eradicating from his explanation any references to the eye and human vision (ibid., 135).

Not only did he set the stage for the radical instrumentalization of observation, but he also took a step further in trying to legitimize it by turning optics into mathematical-physical study of the construction of images by light (ibid., 136). If we define optics as a theory of visual perception, Kepler’s inauguration of light as the necessary agent that produces objects on any kind of a background can be seen as a form of alienation from the human eye. In this way, light as the fundamental agent allows us to observe celestial phenomena *clearly*, due to the mathematical nature of light that turns distance into an element of geometrical analysis of observation (ibid., 138). This turned out to be an excellent foundation for Galileo to enter with his radical rhetoric in defending the telescope and optics.

mediator of the meaning has the ultimate power. Such a conclusion allows asking if the replacement of the eye with its mediator, the instrument, is the same kind of shift that happened when radical constructivism announced language as a mediator of meaning. Seen from a broader perspective, the first shift marked the beginning of the Modern Age, while second marked the age of Postmodernism. More concretely, introduction of the instrument in the 17<sup>th</sup> century empirical ‘science’ influenced a whole new way of thinking about ‘nature’ and its meanings. As opposed to the sensory empiricism of “faithful eyes”, technological instrument was supposed to guarantee standard provided by optics, abstract mathematics and logic (see Böhme 2005). This ‘self-evident’ character of abstract sciences can be seen as one of the ways of legitimating scientific truth as the objective knowledge (see Böhme 2005, Shapin 1996, Hooykaas 2003, Gal and Chen-Morris 2010). On the other hand, emergence of deconstruction in 20<sup>th</sup> century theoretical realms triggers an abrupt change in the way of thinking about ‘thinking’ and its meanings. Again, unlike ‘scientific truth’, deconstruction’s totalizing textual system relies on a sceptical belief that the subject/object gap in knowledge production can never be overcome (see Punday 2003).

Behind both the ‘instrument mediological’ and ‘language mediological’ *episteme* lies the same principle: every *mediation* assumes failure to represent the ‘true’ *present* meaning. The difference is that when Galileo and Kepler debated for the instrument, they did not think about the metaphysical aspect of the instrumental pursuit of knowledge. By inventing an instrument to replace the eye, Galileo and Kepler tried to reach the unreachable. From detaching their inquiry from metaphysics, their experimental outcome ended up in the very center of it—the telescope *constructed* its objects. Telescope constructs objects that are not, and cannot be, seen with the human eye. This, nevertheless, had to be ‘approached with Reason’, as Gal and Chen-Morris explain it, which is why abstract mathematics and optics were a necessary feature of knowledge production. One could then notice how such a paradox shaped the following development of science, giving precedence to abstract, ‘hard sciences’ that can translate the unreachable into the knowable. Deconstruction, on the other hand, relies on the paradox of ‘not knowing’ and becomes a *modus operandi* for much of the subsequent postmodern Theory. That following, empirical science created space for legitimating ‘objective’ Truths, while deconstruction opened up a space for radical skepticism: claiming that there is no objective Truth because we can never grasp the pure meaning in the language. Or it could be said that “pure truth” is akin to evolutionary nature—always changing and branching out and diversifying (hence the reliance on evolutionary metaphors, including that of difference in deconstructionist work). In this way, for both deconstructionist and Baconian empiricists, to grasp truth as a human being through subjective perception means to render it already suspect.

## INTERSECTION(S) OF ‘MEDILOGICAL’ AND ‘OBJECTIVE’ *EPISTEME*

After sketching features of both epistemological shifts in natural and human sciences, I return to Haraway’s article once again for it brings together these confronted, and yet very similar, forms of knowledge production. Haraway criticizes the social radical constructionist point of view:

From this point of view, science – the real game in town – is rhetoric, a series of efforts to persuade relevant social actors that one’s manufactured knowledge is a route to a desired form of very objective power. Such persuasions must take account of the structure of facts and artifacts, as well as of language-mediated actors in the knowledge game.  
(Haraway 1988, 577)

Here, another paradox is at stake. Haraway criticizes radical constructivism for turning science into rhetoric, a “language-mediated knowledge game”, but the idea of instrumentally-mediated knowledge production lies in the core of the modern science since its very beginnings in the 17<sup>th</sup> century. One could say that such paradoxes outline ‘mediological’ *episteme* not as a historically bound formation of knowledge production (17<sup>th</sup> or 20<sup>th</sup> century), but that they rather indicate a certain repetitiveness and non-linear historical development of epistemology.

This does not mean that Haraway suggests relinquishment of both above discussed epistemological paradigms. On the contrary, she criticizes them in order to move beyond their shortcomings and, moreover, to bring them together in a quest for claiming feminist situated objectivity. Why is then a radical constructivist critique of science a problematic approach? Haraway puts it like this:

I, and others, started out wanting a strong tool for deconstructing the truth claims of hostile science by showing the radical historical specificity, and so contestability, of every layer of the onion of scientific and technological constructions, and we end up with a kind of epistemological electroshock therapy, which far from ushering us into the high stakes tables of the game of contesting public truths, lays us out on the table with self-induced multiple personality disorder.  
(*ibid.*, 578)

“Epistemological electroshock therapy” and “multiple personality disorder” metaphorically illustrate the ultimate outcome of the deconstructionist legacy in theory. The subtext of her critique is that one cannot live like that—thinking in

binaries, assuming constant *sliding* of the meaning or denying possibility of any kind of ‘truth’—which is why her claim attempts to go beyond the deconstructionist legacy. Seen from a different angle, Haraway uses the argument of technological instrument as the mediator (and measurement) of the object of knowledge production:

It is a lesson available from photographs of how the world looks to the compound eyes of an insect or even from the camera eye of a spy satellite. [...] The “eyes” made available in modern technological sciences shatter any idea of passive vision; these prosthetic devices show us that all eyes, including our own organic ones, are active perceptual systems, building on translations and specific ways of seeing, that is, ways of life.

(*ibid.*, 583)

However, she conceptualizes it differently from Galileo. Instead of concluding that the camera is more accurate than the human eye in detecting the world—what Galileo did in inaugurating the telescope—Haraway suggests using the accuracy of the instrument (camera) in order to (im)prove the human perception. Such conceptualization overcomes subject/object or man/instrument binaries and allows for ‘objective’ and ‘mediological’ *episteme* intersecting, because feminist objectivity is “about limited location and situated knowledge, not about transcendence and splitting of subject and object” (*ibid.*).

## CONCLUSION

The emergence of the new vocabulary in the 17<sup>th</sup> century, accompanied by technology and empirical methodology, created conceptual grounds for subsequent scientific and philosophical ‘development’. By ‘development’ I do not mean a linear and progressive development, but rather a set of different historical emerging of human thought, which throughout history have changed in a certain way. Such framing allows me to use 17<sup>th</sup> century concepts in order to discuss similar tensions in historically different contexts, such as the 20<sup>th</sup> century.<sup>1</sup> What I have shown is that coming back to certain conflicts reveals a form of repetitiveness in history of epistemology.

In this case, it was a debate over the invention of the telescope that introduced a new epistemological paradigm—instrumental mediation in search for knowledge.

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<sup>1</sup> On a similar note, Ian Hacking in his chapter “What about natural sciences?” discusses the possibility of talking about natural sciences as being constructed. He tries to extrapolate patterns of disagreements – science wars – over natural sciences that were made contemporary by referring to ‘social constructs’ (Hacking 1999, 63). What he means by ‘made contemporary’ is that such disagreements have existed long before the emergence of the phrase ‘social construct’. In that sense, he speaks about wars between realism/nominalism and aristotelianism/platonism as something that existed in pre-Modern times, but which nevertheless still exists as a heated discussion.

On the one side, there were Galileo and Kepler, proclaiming radical instrumentalism, and on the other, Jesuit mathematicians who still believed in the strength of the human eye. It was the point of emergence of the ‘mediological’ *episteme* in which the instrument was supposed to grant accuracy and standardization of the ‘objective’ knowledge. The ‘mediological’ *episteme* is here also recognized in the “linguistic turn” of the 20<sup>th</sup> century: a theory/philosophy of deconstruction. However, the relation between ‘mediological’ *episteme* and ‘objective’ knowledge in this context is fundamentally different. Deconstruction denies the possibility of ‘objective’ knowledge, due to its genuine mistrust in the mediator itself—the language. With Haraway’s entry into the discussion, both ‘mediological’ and ‘objective’ *episteme* become reframed in terms of feminist-situated knowledges overcoming the subject/object gap. Instead of medium (instrument/technology) replacing the subject, Haraway suggests the medium explaining/indicating the way subject produces the knowledge in the first place. In this way, subject becomes the object of knowing which reduces the space of one’s accountability for what is known. This, on the one hand, represents one of the specificities of feminist epistemological inquiries: a constant awareness of the subject’s positioning in processes of producing knowledge. On the other hand, feminist epistemology as a third level of comparison here pinpoints Haraway’s contribution to debates around ‘objectivity’ as a *fundamental scientific lens*, and technology as its major product.

I tried here to create a space for debating about certain repetitiveness of conflicts and paradoxes that can be found in history of epistemologies. Hence, this is one way of mapping parallels and similarities between historically and nominally different epistemologies such as scientific experimental empiricism of the 17<sup>th</sup> century, radical constructivism, and situated feminist epistemology of the 20<sup>th</sup> century.

## REFERENCES:

- Belsey, Catherine. 2002. *Post-structuralism: A Very Short Introduction*. Oxford: Oxford University Press.
- Böhme, Hartmut. 2005. “The Metaphysics of Phenomena: Telescope and Microscope in the Works of Goethe, Leeuwenhoek and Hooke”, (eds) Schramm, Schwarte, Lazardig, *Theatrum Scientiarum: Scenes of Knowledge in the 17<sup>th</sup> Century*. Berlin, New York: Walter de Gruyter.
- Daston, Lorraine. 2009. “Science Studies and the History of Science,” *Critical Inquiry*, 35 (4).
- Derrida, Jacques. 1997. *Of Grammatology*. Baltimore: Johns Hopkins University Press.
- Derrida, Jacques. 1978. *Writing and Difference*. Chicago: University of Chicago Press.
- Gal, Ofer, Chen-Morris, Raz. 2010. “Empiricism Without the Senses: How the Instrument Replaced the Eye”, Gal and Wolfe (eds), *The Body as Object and Instrument as Knowledge*. Springer, 2010.
- Hacking, Ian. 1999. “What about the Natural Sciences?”, *The Social Construction of What?* Harvard University Press.
- Haraway, Donna. 1988. “Situated Knowledges: the Science Question in Feminism and the Privilege of Partial Perspective”, *Feminist Studies* 14 (3).

- Hooykaas, Reijer. 2003. "The Rise of Modern Science: When and Why?", in Marcus Hellyer, (ed) *The Scientific Revolution*. Blackwell Publishing, 2003.
- Kates, Joshua. 2008. *Fielding Derrida: Philosophy, Literary Criticism, History and the Work of Deconstruction*. New York: Fordham University Press.
- Maclean, Ian. 2005. "White Crows, Graying Hair, and Eyelashes: Problems for Natural Historians in the Reception of Aristotelian Logic and Biology from Pomponazzi to Bacon", (eds) *Pomata and Straisi, Historia: Empiricism and Erudition in Early Modern Europe*. Cambridge, Mass.: MIT Press.
- Punday, Daniel. 2003. *Narrative after deconstruction*. Albany: State University of New York Press, 2003.
- Shapin, Steven. 1996. *The Scientific Revolution*. Chicago: University of Chicago Press, 1996.
- Wolfe, T. Charles, Gal, Ofer. 2010. "Embodied Empiricism: Introduction". *The Body as Object and Instrument as Knowledge*. Springer.

# COMMUNICATION MEDIA AND SPACE SUITS FOR MODERNITY: AN IMMUNOLOGICAL READING OF MEDIA ADDICTION

Eva Zekany

The eighties and nineties were a busy couple of decades for cyberspace and cyberculture studies. What began as an American federally-funded military research program in 1973 slowly began to seep into the fabric of everyday life on a global level, seemingly fulfilling Marshall McLuhan's predictions of a 'global village' to come (McLuhan 1962). With a few exceptions, popular culture as well as a few select clusters of academia imagined 'cyberspace' as a potential utopia that would put everyone on an equal footing. Services such as MUDs<sup>1</sup> formed a grand metaphysical soup of iterative, self-generative becomings, where identities dissolved into constructive difference—the empirical version of Deleuzian planes of immanence. However, this sincere enthusiasm was short lived. As it became obvious that web technologies and the machinery of postindustrial capitalism were eminently compatible, critical thought grew increasingly aware of the untenability and inconsistency of the cyberspace myth.

The Internet was exposed as a mechanism governed by colonialist logic (Gunkel and Gunkel 1997), prompting a 'loss of the real' (Turkle 2003), and by the "self-serving ideology of an emerging 'virtual class'" (Turner 2006, 2). The term cyberspace itself became obsolete and philosophically banal. Technoutopianism was thus succeeded by a more nuanced discourse on digital media, especially in the academe. However, that has not stopped the synchronic emergence of a double-sided biopolitical discourse of immunity and contagion, reflected both in sociopolitical practices and texts, and theoretically, as a form of cultural critique of the community space created by technologies of media. To illustrate: Sherry Turkle lamented the destruction of traditional communities through the infiltration of digital communication media into what she considers 'traditional' ways of life (Turkle 2011), while Nicholas Carr has written extensively on the same topic (Carr 2010; Carr 2008). Various self-identified former Internet and media addicts narrated their experiences under the yoke of digitality's destructive fascination (Roberts 2010; van Cleave 2010; Young 1998; Sieberg 2011; Greenfield 1999). At the same time, Internet Addiction as a medical category is being assessed based on the necessity of its inclusion into the DSM-V. All these examples suggest that postindustrial capitalist culture has marked media technologies as a potential source of social problems, problems which are intimately interlinked with the valuing of community, of maintaining an

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<sup>1</sup> MUDs, or multi-user domains, are text-based virtual world platforms that were especially popular in the 90's. Very simply put, MUDs are a combination of online chat and role-playing games, in which users interact with each other through textual commands.

ontological separation between ‘real’ space and ‘cyber’ space, and of seeing certain types of technology use as conflicting with proper social roles. Discourse on technology and media ‘addictions’ such as Internet Addiction, as well as convergent medical categories like Attention Deficit Disorder (ADD), can be seen as a symptom of this contemporary anxiety over digital technologies. These conditions are constructed on the premise that the individuals suffering from them become unable to fulfill their roles as (re)productive members of society: they can neither function as producers of economic and social value, nor can they fit into the binary-gendered paradigm of hetero-reproductive life. When it comes to the link between technology use and pathology, many popular and scientific inquiries gravitate towards key terms such as isolation, anti-social behaviour, or sociophobia—all of which invite a biopolitical understanding of cases such as Internet Addiction.

This paper approaches media addiction as a key term in modernity’s relationship with technology, as well as an expression of a tense yet inseparable bond between technology and notions of life and humanity. Immunity and contagion, as Donna Haraway demonstrates, are an intrinsic part of the dialectics of Western politics, expressing its reliance on the recognition and misrecognition of self and other, of normal and pathological (Haraway 1991, 204). Media and technology are no strangers to the powers exerted by these metaphors, which not only reinforce the otherness of technology in the face of an imaginary of what counts as human, but also reinscribe ‘proper’ life as something that must be distinctly unaffected by media. In theory as well as practice, notions of immunity and contagion are used to identify and critique that which is seen as harmful and external to the self, the community, the social in general. But would it be possible to reverse the negative connotations of the immunity/contagion figuration, and rework media addiction in such a way that it no longer relies on practices of exclusion, isolation and ontological separation of media and their users?

## **IMMUNITY IN MEDIA-SPACE, MEDIATION AND ‘BUBBLES’**

Attempting to provide a definitive account of media is often an exercise in futility, mainly due to the concept’s tendency to travel across multiple disciplines. As a point of clarification, the present article avoids a ‘traditional’ classification of media into individual technical mediums, such as television, radio, film, and instead follows in the footsteps of Sarah Kember, who argues that in the age of ‘new media’, mediation is a far more useful concept. As opposed to ‘media’, mediation avoids the separation between media representations, the matter of media, their reception, context, etc. (Kember 2012) Mediation is not a simple relationship between an audience and a medium. It is far more fluid, unstable and malleable than that: it is a process. It involves both media technologies as material assemblages (the technical object in itself, the substances and materials that compose it, the operations of production that lead to it, the human and nonhuman elements involved in this production, the global and regional socioeconomic conditions and structures that create the context of

production, etc), as well as processes of world-making—of sharing, transmitting and participating in affective assemblages (online communities, games, websites). Precisely because media can be configured in such a complex way, social issues such as media addictions also become difficult to grasp. What is the Internet Addict actually addicted to? Is it the act of physical interaction with a particular piece of technology, or is it certain aspects of this technology? Is the gaming addict dependent on the story of a game, its intellectual or emotional stimulation, the sense of community, or does it also have to do with the physical activity of fingers tapping on a keyboard? And if these kinds of addictions are potentially infectious (spreading from machines to humans), then what exactly is it that spreads?

But the apparent distinction between the matter of the addictive object and its form is not necessarily one that must be upheld. Media theory has taken a decidedly neomaterialist turn, and much ink has been spilled in order to argue for the inseparability of natures and cultures, of matter, discourse and affects entailed by media. The thought of Gilles Deleuze, and his theory of assemblages in particular, advance the idea that there is no separation between nature and culture, matter and representation (Deleuze 2006, 176-9), while Bruno Latour maintains the same, emphasizing that it is modernity's obsession with purification and hybridization that allows these binaries to exist (Latour 1993). The influence of Deleuzian assemblage theory and of Latourian Actor-Network theory is felt in the writings of media scholars like Joanna Zylińska, Sarah Kember, or Jussi Parikka, according to whom media theory is now doing a work of blending distinctions between human and nonhuman bodies, perceptions, affects, and processes. For Parikka, "New materialism is already present in the way technical media transmits and processes 'culture', and engages in its own version of the continuum of natureculture (to use Donna Haraway's term) or in this case, medianatures" (Parikka 2012). This approach to media also has the important side-effect of dismantling the distinction between 'real' space and 'cyber' space in the case of Internet studies, a dualism which has been the foundation of both cyberutopianism and cyberdystopianism in media studies.

The crux of the problem, then, is how to interpret the discourse of contagion and immunity that has been woven around media technologies. This is a point on which Peter Sloterdijk's so-called vitalistic spheric geometry as a form of life can be useful. In his three volume series titled *Spherology* (*Spheres I: Bubbles*, *Spheres II: Globes*, *Spheres III: Foam*), Peter Sloterdijk elaborates a philosophical rereading of human history. The core idea of *Bubbles* is that humans use technology to create protective spaces (spheres or bubbles) through which to explore and control their environments by separation and interiorization. Life, viewed in such terms, is ordered and constrained through the geometry of spherical environments. Timothy Campbell compares the human as envisioned by Sloterdijk to an astronaut, whose protective suit creates around her a safe, immunized space isolated from the outside (Campbell 2011, 87-8). In my reading, this so-called outside seems to be similar in nature to a Deleuzian plane of immanence, of absolute differentiation, upon which, as Elizabeth

Grosz notes, the individual and her identity is nothing more than a temporary coagulation of flows (Grosz 2011). In this context, the bubble as a figuration is a precondition for western modernity to sustain its own illusion: as Campbell comments, “modernity essentially consists of the struggle to create these metaphorical space suits, immunitary regimes ... that will protect Europeans from dangerous and life threatening contact with the outside” (Campbell 2011, 88).

Sloterdijk’s bubbles organize existence and determine the limits of experience. They create “complex intertwined intimacies which forms us and interpenetrates us” (Ferguson 2012). But instead of insulating, they are porous and open to the affects, matters and representations of the outside. As Ferguson aptly summarizes, the intention of the spherological project is to counteract the presumption of an autonomous modern subject. Immunity and community seem to be inseparable for Sloterdijk: one is not immune within one’s own personal bubble of individuality, but can be protected from the ‘outside’ through forming ‘foam’, systems of bubbles which provide some element of security. Bubbles, according to Sloterdijk, are protective technologically-mediated spheres that humans construct around them, and which allow them to explore and interact with their environment through isolation and separation (Herbrechter 2013, 218). It seems that bubbles, in Sloterdijk’s view, are auto-immunitarian rather than immunitarian, as they turn the subject against herself by making it impossible for her to belong to what he sees as an ‘authentic’ community. This form of isolation, Sloterdijk claims, could be averted through the formation of foam, which creates a space for non-repressive community and the embracing of pluralistic forms. Closely related to spheres is the concept of anthropotechnics—the process through which humans are shaped into being through artificial spheres of existence. Social institutions like schools, modes of organization like the family or the couple, or sexual norms can count as anthropotechnics. But just as well, the mediations of television, art, music, computer games or Internet communications can also function in the same way.

As Campbell also demonstrates, Sloterdijk’s vision of media falls back on distinctly Heideggerian divisions of proper and improper uses of technology. In *The Question Concerning Technology*, Heidegger argues that modern technologies (and he uses the example of the typewriter) leads to “the human being cut off from a more authentic relation to the natural world, [and] also cut off from an authentic relationship to itself” (Wolfe 2013, 4). Not all technologies are equally harmful in his view: the typewriter might sow the seeds of impropriety within the user, but handwriting, a far older technology, does not. Sloterdijk, despite his attempt to approach the potentially positive way in which media can create communities, still relies on the tired Heideggerian trope of some technologies being better, purer, more human-friendly than others. It is important to note that only some media are improper, while others are safe. Kees Winkel observes that for Sloterdijk, bubbles are not necessarily harmful, but that media can disturb this process through their potential to cause a misuse of the affects, ideas and desires that they transmit (Winkel 2012). It is clear

that certain types of bubbles lead to the loss of authentic community—and this notion is definitely no stranger to many detractors of modern technologies of communication. Sherry Turkle, for example, asserts that what users of online social media experience is “not community” (Turkle 2011, 201). For her, the perceived isolation that results from mediation prohibits any authentic affective bonds and experience, whereas ‘real’ communities “are constituted by physical proximity, shared concerns, real consequences, and common responsibilities” (Ibid. 202).

It is difficult to deny that the relation between media and their human users can pose certain practical as well as theoretical problems. But simply condemning certain media as inherently ‘proper’ or ‘improper’ does nothing but further entrench a kind of thinking that eventually leads to a categorization of users themselves into good and bad, fit and unfit. This is not to say that media spaces cannot be seen as bubbles, but simply that the interaction between a human user and nonhuman media technologies is negative or positive only insofar as it is figured within a preexisting cultural and political framework. The obsessive woman reader in 18<sup>th</sup> and 19<sup>th</sup> century Britain became a ‘species’ as Foucault would say, because specific power/knowledge nexuses allowed it to emerge as a category. The woman reader embodied normative ideas about a woman’s place in the social order, and became a canvas for the inscription of fears about women’s sexuality and rights.

Internet Addiction, ADD, or other contemporary media addictions signify bubbles which are given a negative meaning by being interpreted as pathologies. In a spherological reading, they can be read as cases of compromised immunity. Media are thought to isolate, in the sense that they prevent the possibility of forming any authentic communities, and of fulfilling proper roles within them. As the human is absorbed into the hybrid human-nonhuman assemblage of the Internet medium, for example, there is a danger for her sphere to become too porous, too exposed to the contaminating influence of the media assemblage. However, the concept of the bubble as articulated by Sloterdijk, does not inevitably prescribe this reading. The porous vulnerability and openness to contagion exhibited by the media user is the very precondition for the creation of alternative forms of community, of alternative relationships to nonhuman actors, and novel ways of circulating affect and spaces for creativity.

## **CONTAGION THEORY, COMMUNICATION, AND COMMUNITY**

If the concept of immunity is one that is ambiguously framed for the purpose of both criticism and productive theoretical gestures, the case of contagion is more clear-cut—it rarely heralds anything positive when it comes to technology. The computer virus has been the bugbear stalking digital networks for decades, instilling fear into casual technology users, as well as at an institutional level. By the turn of the 21<sup>st</sup> century, universal viral contagion had become a prospect with potentially disastrous consequences. Informational contagion is nothing as insignificant as having one’s operating system thrown off kilter—it is a threat that could collapse economies

and trigger wars. And while information might be the main focus of contemporary discourse on contagion, contaminating computer codes are not the only thing that can be transmitted.

Through the logic of computer viruses, information can be contaminated and information itself can contaminate. But information, as data, is only marginal to this debate. It is communication, with all its material, symbolic and affective attributes, that is in fact the source of the threat, it seems. Well before computer viruses, communication has been embroiled in a discourse of contamination since the earliest beginnings of networked communication systems like the telegraph, telephone and even radio (Durham Peters 1999; Sconce 2000). But information is not the only contaminating factor in communication, as current as well as 19<sup>th</sup> century theories of crowd contagion have argued. The popularization of network and assemblage theories have prompted a resurgence of interest in contagion, and have repurposed it as a way of seeing the material and discursive conditions of postindustrial modernity.

In Tony Sampson's reformulation of Gabriel Tarde's theory of social contagion from the 19<sup>th</sup> century, contamination is a way of seeing what kinds of things are brought in relation with one another, and what kinds of encounters occur within the social fabric. It intersects with the neomaterialist agenda in the sense that it tries to avoid the separation between human subjectivity and the objects that they encounter. Tarde constructed a theory of imitation/contagion as an alternative to the Durkheimian theory of collectives, which was "binary, resonant and overcoded" (Deleuze and Guattari 1987, 218-9) and maintains a strict separation between the social and other domains. Contagion theory is a way of seeing the world in terms of monadic singularities, (i.e., foldings of the social, biological, cultural and psychological): a mix of matter, affect and cultural representations. Now, according to Sampson, currently there are two kinds of viral paradigms circulating through the fabric of modernity: One is a molar virality, which takes disease transmission as a vector. This is the virality that is present in biopolitical discourses which use the vocabulary of the epidemic (terrorism, online security)—and presumably, this would imply a defective theory of contagion, which still preserves the boundedness of the individual. On the other hand, there is a molecular virality, for which the best example is the orchid-wasp assemblage that Deleuze and Guattari talk about—an assemblage constituted by accidents of desire, of desire-events. This molecular virality, like the wasp and the wasp-imitating orchid of the *Thousand Plateaus*, is the way in which "a swapping of code fragments from one machine to another leads to the emergence of 'strange, unheralded new assemblages'" (Tarde 2012, 45).

What gets transmitted in a Tardean virality is a sort of intersection or translation from biological to social desires, propagated through imitation. What spreads through contagion is what Tarde calls imitative rays that take on a life of their own. There is no medium for transmission, there is not necessarily any order for the transmission either. Contagion is the way in which the porousness of subjects opens them up to the desires and affects of others (both humans and nonhumans). The self itself

becomes part of the fabric of contagiousness. What is really useful about contagion theory is that it offers an alternative to the self-contained, individual subject whose agency is based on rational decisions. Subjects are irremediably tied to others, and in fact, the subject itself does not even exist in this context. One can only speak of a subjectivity in the making, because both identity and individuality are constructed and reconstructed (as well as constructing and reconstructing) contagious relations.

If media addictions are to be read through contagion theory, it is possible to do so in two ways: through a molar contagion theory, in which contamination passes hierarchically from machines to humans, from one institution to the other, and from one human to the other through direct contact; or through molecular contagion theory, which emphasizes the importance of not individuality, but collectivities and assemblages. In fact, Tarde's figuration of the somnambulist is in many ways very much alike to the Internet Addict, because it refers to a blurring of identity boundaries and of ontological distinctions which occur in a state of lowered consciousness, of flawed rationality and loss of self. The Internet Addict emerges when one assemblage captures fragments of another assemblage's affects and desires.

Contagion theory seems to be concerned with an immaterial materiality. Thinkers like Brennan or Lisa Blackman certainly do acknowledge the importance of the material, of bodies, but their emphasis is on the immateriality of what is transmitted. A more material approach to matters of contagion comes from epidemiological discourses, which focus on the material-discursive construction of disease. Protevi, for example, looks at the case of AIDS in order to underline the way in which the viral (whether we're talking about the viral as material or conceptual) implies a renegotiation of the borders of the body. The body is increasingly conceptualized as porous, fragile and susceptible to ruptures, which means that its integrity must be protected more than ever. As both Protevi and Parikka argue, the cultural fear of contagion is tied both to the body politic and the body biological.

## **MEDIA ADDICTION DECONSTRUCTED**

In the first part of the paper I have tried to lay out a critical framework that can help position media addiction within a philosophical discourse that struggles with the overlaps and contradictions between the twin paradigms of contagion and immunity. In what follows, I would like to examine more closely the nature of media addiction, as a technicity ("emergent form of relations between technologies and living bodies" (Bucher 2012, 11)) that is increasingly becoming the focus of medical and psychological research, as well as popular discourse.

Before the advent of Web 2.0, it was not unthinkable to construe media addictions as neatly delimited behavioural problems that arose in conjunction with specific technological media. Media addictions did not even need to be of the digital sort: the 18<sup>th</sup> century saw the unfolding of panics around the idea of women reading obsessively (Jack 2012; Phegley 2004), "radio mania" was a threat for the men of the roaring twenties (Butsch 1998), and the spectre of television addiction (Kubey and

Csikszentmihalyi 2002) has been floating around in many different cultural contexts since the respective popularization of TV sets. In the past, media theory drew up boundaries. One could be addicted to the TV, without necessarily presenting addictive behaviour in relation to radio or books. But Web 2.0, or rather the cumulative shifts in media structures that is brought under the umbrella term of Web 2.0, has challenged the fixity of these boundaries. Web 2.0 refers not to a fundamental change in the technology of the web, but rather a recent refiguration of the way in which various media work in tandem. Contemporary Internet is perhaps more recognizably an assemblage than any other networked system before it. Web sites are no longer self-contained platforms, but rather a distinguishable ramification intensely connected to other parts of the assemblage, they are “increasingly entangled in a networked context and shaped by third-party content and dynamically generated functionality” (Helmond 2013).

As Anne Helmond argues, the Internet is now made up not of individual websites, but of ecologies (Ibid.). The user of Web 2.0 is not a passive consumer of information, but an important actor who generates content that feeds into the assemblage (Langlois, McKelvey, Elmer and Werbin 2009). Therefore attempting to theorize the Internet Addict, for example, becomes a needlessly complicated challenge. Is a person addicted to the Internet if they spend all their time online streaming videos or listening to music? Or playing games? Blogging? What about the person who spends their online time not in front of a computer, but by checking their web-connected smartphones every ten minutes? But even if we concede that media-addiction is a more useful umbrella term for all these ‘problematic’ technicities, there is still the question of what differentiates an addict from a ‘normal’ person who is merely taking advantage of all the affordances of digital technologies without feeling any compulsion or pathological need to do it?

Even if one accepts that Internet Addiction exists as a legitimate medical diagnosis and not just a contemporary sociocultural anxiety, there still remains the question of what the user is addicted to. As briefly pointed out earlier, media are not static binary structures, a coupling of hardware and the representations it produces. They are processes of mediation between assemblages of human and nonhuman parts, interweaving matter, affect and intensity. The television addict, the radio addict, the book addict are intimately connected to both the material basis of their desired object, and the affective load that it transmits. Better yet, there is no separation between matter and affective load. I would argue that media, in the case of the so-called addict, serve not to isolate, as some scientific and popular discourse seems to suggest, but rather as a mechanism of sphere creation that still maintains the porousness necessary for community creation and connectivity. The media addict, both as a figuration and as a medical category, is vague enough in order to encompass almost any kind of technicity that can be conceived as problematic. The problem itself is quite blurry: medical research references the potential psychological, social, educational and intellectual effects that improper media use can incite (Coman and Ross 2012).

Fandom participation can provide an interesting example as to how spherological immunity and contagion work their way into discourse on medium-use. The contemporary fan is a unique example: the object of her desire is part of a media assemblage (most commonly music, film, television series, literature, games), while at the same time, the coagulation of fannish identity most happens through a medium, such as various online platforms. Fandom participation should not automatically be considered a media addiction, despite the frequent pathologizing language of obsession and addiction used to describe fans of certain media (Bell 2010; Reilly 2012; Jenson 1992). In fact, the longstanding history of pathologizing the fan (Pinkowitz 2011; Mousoutzakis and Riha 2010) might have much in common with media addictions (the obsessive-woman reader comes again to mind, especially given the prevalence of gendered elements in the construction of the pathologized fan (Ibid.)). One simple (and perhaps unjustly reductive) way to analyze the figure of the media fan is as an individual in whose case separation from one community results in tight connections to another community; therefore fandom is not only about separation from community, but rather joining an improper community. Viewed from the outside, fandom forms into an immunized, cohesive sphere. However, this view is complicated not only through a Sloterdijkian or assemblage-oriented analysis, but also by an empirical glance into the workings of online fandoms.

Fan communities and other internet communities can often see the world through rose-tinted technoutopian glasses—an alternative to the closed-mindedness and exclusionary nature of ‘terrestrial’ communities. Many participants see online communities as safe spaces within which they can pursue interests and practices which they perceive as either divested from the real world (role-playing blogs and games), or unacceptable in their ‘real’ communities (pornographic fan art and fiction). As Joseph Brennan shows in his analysis of online slash fandom, the infrastructure of the Internet allows for the creation of ‘bubbles within bubbles’, or isolated spaces within a space that is already seen as isolated—a kind of fracturing of the online community into smaller components. Online platforms such as Livejournal or Tumblr are seen by a majority of fans as safe havens where they can build tight-knit communities that supplement the deficiencies of their ‘real’ communities, and yet, even these communities have “as much potential for prejudice and narrow-mindedness as real-world communities, perhaps an even greater potential given cultures of anonymity” (Brennan 2013, 6). I would argue that if the act of connecting to the Internet is a catalyst for the formation of personal bubbles from the environment, and an entry-point to the sphere of online community, this should not be seen as a finite action, but rather as a process of alternating and layering states of isolation and inclusion. Becoming part of an assemblage such as an online community, like in the case of orchid and wasp, is no simple matter of gluing two distinct parts together. It entails a process of negotiation, imitation, redefinition of boundaries, and the emergence of assembled properties that exceed the properties of the parts involved.

Pinkowitz (2011) examines in detail the way in which discourse on fandom (which here can be understood as addiction to one specific example of medium) constructs a carefully drawn boundary between the normal and the pathological individual and their media spheres. She argues that the crystallization of the inappropriate Other emerges through the cultural encoding of rules regarding one's relationship to the medium/object of desire, and "as long as the fan (or antifan) shows 'good common sense' and remains 'rational' and 'in control,' he or she will be spared the condemnatory and pathology-citing discourses of the dominant hierarchy"(Ibid.). The transgressions against this 'good common-sense' are, I would argue, transgressions against norms of self-contained individuality, and gender, sex, sexuality, and race codes. Once the media addict has lost her common sense, her subjecthood is soon to follow.

## CONCLUSION

Peter Sloterdijk's spherology is essentially a theory of connectedness, and an expression of apprehension over how easily connectedness, the glue that holds together the world as we know it, can turn into its flipside: isolation. It is not surprising that Latour, the pioneer of Actor-Network Theory, has remarked on the similarities between these two approaches (Latour 2009). However, while ANT is consonant with themes of connectivity, mediation and inevitable entanglements between human and nonhuman elements, the vision of networks and passages is far too sterile for Sloterdijk: "Unlike networks, spheres are not anemic, not just points and links, but complex ecosystems in which forms of life define their "immunity" by devising protective walls and inventing elaborate systems of air conditioning"(Latour, 2011).

Sphereology is essentially a theory of connectedness and, regardless of its main postulations, should be receptive to being connected, in its turn, to a vocabulary of contagion as well. Contagion, as articulated by Tarde and furthered by his descendants, seems to be precisely the manifestation of the turbulent ties that come into being between ideas of being connected/networked, the isolation and transcendence proper to the Enlightenment model of the individual, and the fear of contamination voiced collectively by various epidemiological discourses. This paper has tried to untangle some of these ties through a reflection on media, which are increasingly acknowledged as shapers of lives and ways of living. Sloterdijk's writings, with his examples drawn from urban planning, environmental studies and geography, have been assimilated into critical studies of space and the politics of space. I have used the example of media addiction to suggest some pathways through which spherology could be equally constructive in the fields of media philosophy and philosophies of technology.

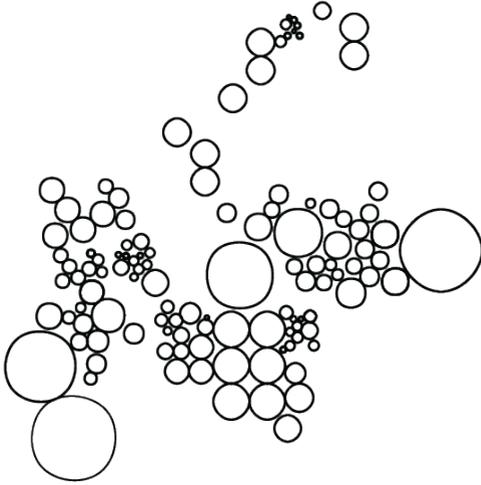
Sloterdijk's philosophy of spheres is not an answer to any of the questions and apprehensions raised by mediation. Sloterdijk himself was ambivalent about media, and their potential to isolate and to produce 'anti-sociality'. What he does is to offer

a set of tools that can clarify these issues, if not to solve them. Mediation, in all its complexity, creates an inconsistent and contradictory tug-of-war between the need to isolate, to immunize, to protect the notion of humanity (if not always individual humans themselves), and the drive to facilitate fusions between human and nonhuman actors, matters, fluxes of affect and ideas. Media addiction, much in the same vein as drug addiction, is discussed as an event through which the afflicted individual becomes alienated, isolated from the rest of her network. I have tried to show how coupling spherology with theories of contagion allows a more balanced dynamic between the ideas of contagion, immunity, isolation and connectivity which are part of the discourse on media addiction.

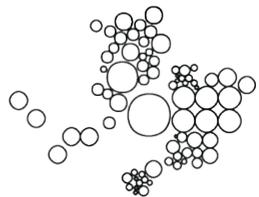
## BIBLIOGRAPHY

- Bell, Amanda. 2010. "'Twilight' fan reaches out to advice column, is told to 'seek counseling'." *Examiner*, March 29.
- Brennan, Joseph. 2013. "Fandom is full of pearl clutching old ladies: Nonnies in the online slash closet." *International Journal of Cultural Studies*.
- Bucher, Taina. 2012. "A Technicity of Attention: How Software'Makes Sense'." *Culture Machine* 13.
- Butsch, Richard. 1998. "Crystal sets and scarf-pin radios: gender, technology and the construction of American radio listening in the 1920s." *Media, Culture & Society* 20(4): 557-572.
- Campbell, Timothy. 2011. *Improper Life*. Minneapolis: University of Minnesota Press.
- Carr, Nicholas. 2010. *The Shallows*. New York: W.W. Norton.
- Carr, Nicholas. 2008. "Is Google Making Us Stupid?." *The Atlantic*, 1 July.
- Coman, Emil and Ross Buck. 2012. *Media Addiction*. Saarbrücken: LAP LAMBERT Academic Publishing.
- Deleuze, Gilles and David Lapoujade. 2006. *Two regimes of madness: Texts and Interviews 1975-1995*. Los Angeles, CA: Semiotext(e).
- Greenfield, David N. 1999. *Virtual addiction: Help for Netheads, Cyber Freaks and Those Who Love Them*. Oakland, Calif.: New Harbinger.
- Grosz, Elizabeth. 2011. *Becoming Undone*. Durham: Duke University Press.
- Gunkel, David J and Ann Hetzel Gunkel. 1997. "Virtual geographies: The new worlds of cyberspace." *Critical Studies in Media Communication* 14(2): 123-137.
- Herbrechter, Stefan. 2013. *Posthumanism: A Critical Analysis*. New York: Bloomsbury.
- Jack, Belinda Elizabeth. 2012. *The Woman Reader*. Yale University Press.
- Jenkins, Henry. 1992. *Textual Poachers: Television Fans and Participatory Culture*. New York: Routledge.
- Jenson, Joli. 1992. "Fandom as pathology: The consequences of characterization." In *The Adoring Audience: Fan culture and Popular Media*, Lisa Lewis (ed), New York: Routledge.
- Kember, Sarah. 2012. "Introduction." *After New Media*. October 10.  
<http://www.gold.ac.uk/podcasts/app/front/podcastsBySeries/1> (accessed 19 Mar 2014).
- Kubey, Robert and Mihaly Csikszentmihalyi. 2002. "Television Addiction is no mere metaphor." *Scientific American*. February, 2002.

- Langlois, Ganaele, Fenwick Mckelvey, Greg Elmer and Kenneth Werbin.2009. "Mapping commercial Web 2.0 worlds: Towards a new critical ontogenesis." *Fibreculture* 14: 1-14.
- Latour, Bruno. 2009. 'Spheres And Networks: Two Ways To Reinterpret Globalization'. *Harvard Design Magazine* 30: 138-144.
- Latour, Bruno. 2011. 'Some Experiments In Art And Politics'. *E-Flux Journal* 3 (23).
- McLuhan, Marshall.1962. *The Gutenberg Galaxy*. Toronto: University of Toronto Press.
- Mousoutzanis, Aris and Daniel Riha. 2010. *New media and the politics of online communities*. Oxford: Inter-Disciplinary Press.
- Parikka, Jussi. 2012. "New Materialism as Media Theory: Medianatures and Dirty Matter." *Communication and Critical/Cultural Studies* 9(1): 95-100.
- Phegley, Jennifer. 2004. *Educating the proper woman reader*. Columbus: Ohio State University Press.
- Pinkowitz, Jacqueline M. "'The rabid fans that take [Twilight] much too seriously': The construction and rejection of excess in Twilight antifandom". *Transformative Works and Cultures* 7.
- Reilly, Phoebe. 2012. "Is There Something Psychologically Unhealthy About Being a Fan?." *Vulture*, 16 October. <http://www.vulture.com/2012/10/is-being-a-fan-psychologically-unhealthy.html>
- Roberts, Kevin J. 2012. *Cyber Junkie: Escape the Gaming and the Internet Trap*. Center City, Minn.: Hazelden.
- Sampson, Tony D. 2012. *Virality: Contagion Theory in the Age of Networks*. Minneapolis: University of Minnesota Press.
- Sieberg, Daniel. 2011. *The Digital Diet: The 4-step plan to break your tech addiction and regain balance in your life*. New York: Three Rivers Press.
- Turkle, Sherry. 2003. "Virtuality and its Discontents: Searching for Community in Cyberspace". Originally published in *The Wired Homestead: An MIT Press Sourcebook on the Internet and the Family*, by Turrow, Joseph and Andrea Kavanaugh. MIT Press.
- Turkle, Sherry. 2011. *Alone Together*. New York: Basic Books.
- Van Cleave, Ryan G. 2010. *Unplugged: My Journey Into the Dark World of Internet Addiction*. Deerfield Beach, FL: Health Communications.
- Winkel, Kees. 2014. "Notes on Sloterdijk's Philosophy of Plural Spherology; people, space and place." *Crossmedialab* 16 December. <http://www.crossmedialab.nl/blog/post/287/Notes-on-Sloterdijks-Philosophy-of-Plural-Spherology-people-space-and-place> (accessed 22 Feb 2014).
- Young, Kimberly S. 1998. *Caught in the net: Net: How to Recognize the Signs of Internet Addiction, and a Winning Strategy for Recovery*. New York: J. Wiley.



# MEDICAL LIFE WORLDS



# ABOUT A “GAY DISEASE”: THE CONSEQUENCES OF USING METAPHORICAL UNDERSTANDING IN EARLY AIDS DISCOURSES

Nikolett Kormos

Aristotle defines metaphor in *On the Art of Poetry* as something that “consists in giving the thing a name that belongs to something else” (1457 b3). In *The Art of Rhetoric*, he clarifies that “[t]he *simile* is also a metaphor, as it is only slightly different. For when the poet says ‘and like a lion leapt’ it is a simile, but when ‘a lion leapt’, it is a metaphor; for because they are both bold, he spoke Achilles by the metaphor of the lion.” (1406b). It is clear for him that metaphor is one of the most useful means to gain knowledge (1410b) via, therefore, highlighting a characteristic of an object by naming it another name belonging to another object which latter one is considered as one of the most proper embodiment of the characteristic intended to be emphasized in terms of the first/described object. If Homer wanted to emphasize that Achilles is “bold”, he could do this effectively by referring to him, in a certain situation, as a lion: an animal which is considered to be one of the boldest. It is important to see that the lion is “essentialized” in the sense that it is imagined as a symbol of a certain characteristic (boldness).

Even today, we tend to use metaphors on an everyday basis according to these ancient considerations. What these early accounts suggest to us is that speaking metaphorically means: at first, an attempt to make a certain object in a certain situation the most understandable via emphasizing its most important characteristic with regards to that situation; second, an identification between the described object and another object which is considered as the embodiment of the relevant characteristic of the described object; and connectedly, third, essentializing the describing object which means here that it is used only to highlight one relevant characteristic of the described object. It is clear, therefore, that a general consensus must exist in terms of the understanding of the describing object so the metaphor as such can reach its aim. After all, in terms of metaphors used for the sake of cultural/political understanding, the most urgent questions to ask are how something/somebody becomes an embodiment of a certain characteristic, what kind of ideological elements take part in this process, and what consequences can be evoked at the individual level by such a social understanding.

In this article I do not wish to deal with AIDS itself as a metaphor (Sontag 1978, 1989; Patton 1990, 64-65) but rather I attempt to highlight how early AIDS<sup>1</sup> discourse<sup>2</sup> implicitly applied the historical, medico-legal image of “the homosexual”

<sup>1</sup> I use “AIDS” for practical reasons; however, in terms of the early discourse on the referred immunodeficiency syndrome, the concept of AIDS can be used only retrospectively.

<sup>2</sup> I am referring to “western discourses” (US, Great Britain, Australia), in the early 80’s.

as a metaphor of the PWA (Person living With AIDS)<sup>1</sup>. I argue that as a result of this (indeed harmful) metaphorical discourse, on the one hand, the politically active gay identity was relegated to the level of the passive homosexual, and, on the other, that this metaphorical discourse had harmful consequences with regard to how gay people at the time perceived and felt themselves within the sphere of the social. At first, I interrogate the historical implications of homosexuality and gayness with a specific emphasis on the issue of metaphorical thinking in HIV/AIDS discourses, and then I attempt to highlight how (discursively) obscuring the differences between them resulted in gay shame as an important stage before giving conservative answers to the AIDS crisis (as it was identified by Crimp as a problem [2002]).

## **HOMOSEXUALS, GAYS, AND PEOPLE LIVING WITH AIDS**

What we understand today as (homo)sexuality was born in the second half of the nineteenth century (Epstein 1996, 51; Weeks 2010, 5). Linnaean scientific tradition, especially the presumption that “all of nature can be accommodated within a taxonomy” (Foucault 1973, 126)—and so “things” have to be named and described (Foucault 1973, 132-133)—intertwined with scientific interest in sexuality. As a result, an order of sexual categories has come into existence—an order which designated and still designates the acceptable and possible ways of conceiving sexuality. The necessarily essentializing process of drawing and reorganizing boundaries according to individuals’ “sexuality” proved itself to be a productive ground for ideology where heteronormative ideas can be anchored to again and again (Rubin 1984, 275-287). Since the category system was created from a heteronormative—claimed as scientifically neutral—viewpoint, it could hardly support non-heteronormative ideas: the designated paths for thinking have been circulating among the categories of normal-natural heterosexuals and the abnormal sexual others. Therefore, already the construction of this scientific-sexual system—which has had a great impression on general thinking, too—created the categories of “we” (the normal) and “they” (the abnormal) within the field of sexuality. Early HIV/AIDS discourse re-emphasized just these pre-created categories by suggesting, from the very beginning, that the society faces a “gay disease”, therefore, a disease of those who failed to fulfill heterosexual imperatives (especially monogamy and heterosexual object choice). “Gay plague” was not only a term used by media discourses; the name “GRID” (Gay Related Immune Deficiency), for example, was used by medical professionals and researchers from 1982 (Epstein 1996, 50) to describe/name the heretofore neglected<sup>2</sup>

<sup>1</sup> The concept of the PWA (Person living with AIDS) is an alternative description of “AIDS victim”, and “AIDS patient”. Since the concept of victim „implies defeat”, and the concept of patient „implies passivity, helplessness, and the dependence on the care of others”, The Advisory Committee of People with AIDS (later: National Association of People with AIDS), in 1983, claimed for a more proper description (the result is Person/People living with AIDS – PWA). See: Grover: “AIDS: Keywords” in: *AIDS: Cultural Analysis/Cultural Activism* (ed. Douglas Crimp), MIT Press, 1988. pp. 17-30.

<sup>2</sup> AIDS, of course, was not a new health phenomenon in the ’80s. Before that, IV drug users already had showed the „symptoms”, however, as they were in a bad health condition in general, the

and so insufficiently defined health-phenomenon. We can understand more properly what the problem is with this discourse if we try to understand, at first, the main differences between “gay” and “homosexual”.

The historical concept of “homosexuality” is a perfect example how the normativizing power of medical discourse works. Though “homosexuality” was engendered by scientific interest, as Watney claims:

“The category of ‘the homosexual’, together with the wider system of sexual classifications which make up the modern ideology of sexuality, is no more scientifically rigorous, natural or descriptively accurate than the category of the molly or of the gay man. All are equally historically specific, equally contingent, equally provisional and equally transitory.” (Watney 2000/a, 65)

Nevertheless, and presumably this is also the reason why Watney articulates the previous claim, “homosexuality” has made a career not only as a medico-legal term, but also as a “neutral”, descriptive one which is proper for describing someone who is not heterosexual. However, as Watney argues further, “homosexuality” cannot be a neutral category or identity because this term can only be interpreted in its relatedness to its generative father—to heteronormativity. Therefore, while heterosexuality has a reason for existence in itself, homosexuality does not. The “homosexual” person is defined by her/his sexualobject-choice, therefore, the concept of “homosexual” evokes a framework within which sex, gender, and sexual categories are presumed as definable, stable, and natural. It implies, furthermore, that a homosexual person does not have agency, he only has an opportunity to identify with the power-made category, and in this case he can be, at the best, tolerated within the system (Watney 2000/b, 53).

While, therefore, medical discourse has been preoccupied with personal respects of sexuality, politics of sexuality reflects on sexuality(ies) at the level of society and nation-states (Weeks 1998). The statement that a homosexual person can be at most tolerated within a system means that homosexuality only can be a personal truth about sexuality—defined by the dominant discourses and ideological inquiries of a heterosexual system—and never a socially accepted one; it does not make “normal”, reproductive sexual relationships possible. As Watney puts it, referring to homosexuality:

“Gay Liberation insisted, on the contrary, that what lesbians and gay men share is not some identical, personal essence of homosexual desire, but the social experience of discrimination and prejudice, which are mobilized by the workings of power—the law, the press,

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phenomenon was not detected as a specific one. The death of several middle-class (gay) men—and few women—who showed similar „symptoms” before their death (most notably Kaposi’s sarcoma) was the cause of why the phenomenon started to be investigated.

education, the Church, social science, and so on—upon the terrain of sexuality as a whole.” (2000/b, 54)

The difference Watney offers to us between the historical concept of “homosexual” and that of “gay” is based on the difference between personal and community-based truth(s) about sexuality. While the former one is within the terrain of medicine, and necessarily essentialized on the ground of sexual object-choice (referring to someone as a “homosexual” means, practically, providing an embodiment of same-sex sexual object choice), there seems to be a possibility in the latter one to overwrite the necessity of searching for an essentialized personal truth—such as homosexuality—and rather to focus on social reality and agency. Young’s definition of a social group also can highlight that “a social group ... is not defined primarily by a set of shared attributes, but by the sense of identity that people have” (Young 1989, 259). Therefore, a group of homosexuals—let us say, in the beginning of the twentieth century—is not a social group. Although they had “shared attributes” come from the categorization of power based on sexual object-choice, they did not have a social identity—a common, politicized feeling of marginalization; in this sense, the social presence of homosexuals in the ‘20s was relevantly different from that of gays in the ‘70s. The figure of the “homosexual” is a passive one who is identified by dominant discourses; lesbian and gay, on the other hand, are active figures that identify themselves by the critical recognition of dominant discourses and their designated social spaces. With the act of self-identification, gay and lesbian movements attempted to offer alternative discourses, and establish a social space where there is not only one community-based sexual truth but there can be several.<sup>1</sup>

I can re-establish my statement—standing now on a more firm basis—that one of the most crucial features of the mainstream HIV/AIDS discourses in the (early) 80’s is that it explained a health crisis by essentializing “gayness” as an embodiment of promiscuity and “homosexual” object choice and then used the essentialized “gay” figure as the describing object of PWA. When discourses referred to AIDS as “gay plague” or “gay disease” they wanted to explain the frightening health crisis by using a metaphorical understanding; this understanding, therefore, was constituted by a describing object (gay relegated to the level of homosexual) and a described object (PWA). As a result, these discourses re-affirmed a heteronormative logic, re-pathologized homosexuality, and pathologized gay lifestyle as something which is composed by the symptoms of homosexuality as an abnormal sexual object-choice

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<sup>1</sup> The regulative categories still remained unchallenged until the birth of ‘queer’, in the late ‘80s.

and promiscuity as an abnormal social-sexual behavior—as a symptom and cause<sup>1</sup> of AIDS. Furthermore, the “personal truth” character of homosexuality in contrast to heterosexuality was re-emphasized and so heterosexuality was re-revealed not only as a personal, but again, as a community-based truth—indeed, as a necessity. As Treichler notices, the “appeal of thinking of AIDS as a ‘gay disease’ is that it protects not only the sexual practices of heterosexuality but also its ideological superiority” (Treichler 1987, 49).

One of the reasons why it is important to notice that AIDS discourses evoked the old, medico-legal image of the “homosexual” with all of its connotations is the tight connection with the fact that just the same “gays” (treated, therefore, as homosexuals) who were, indeed, badly affected by the virus were handled by the mainstream media and also by political actions as outsiders; the discussion was about “gays” as potential victims of AIDS, but without their participation. Their existence was only used as an explanatory fact, a metaphor of why the horrible disease had come into existence. According to this, AIDS was “created”<sup>2</sup> as a “fatal disease” which affected “those” (not including “us”) who are sexually indecent. PWAs were, in this sense, spectacles due to their affectedness and its (alleged) implications about their homosexual promiscuity. Gay men were, although, represented as a group, they could hardly perceive themselves as. Therefore, when AIDS is discussed as “gay plague”, every person living with AIDS was exposed to the heterosexual, normativizing gaze of the general public which, as I argue hereafter, resulted in gay shame.

## **GAY SHAME AS A CONSEQUENCE AND ITS CONSEQUENCES**

The exposedness, the spectacle-nature of the PWA as an essentialized and pathologized “gay” seems to be an organizing principle in how the AIDS crisis was interpreted in the public sphere, especially by mainstream media (Watney 1988). I argue here, therefore, that heteronormative social gaze and heteronormative social perception need to be given specific significance in my further analysis in order to gain knowledge about specifically gay experiences. I attempt to reconstruct these specific experiences as certain kinds of bodily consequences of the metaphorical discourse. As we have already seen, the public discussion about AIDS as a “gay disease” continuously used a metaphorical understanding in which “gay” existed as the describing object of the PWA. As a result, the way that gays were socially perceived

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<sup>1</sup> The idea of the “patient zero”—articulated in the book *And the Band Played On: Politics, People, and the AIDS Epidemic* by Randy Shilts (1987)—provided answers to two urgent inquiries: “where the disease came from”; and “who is responsible for its spread”. The „patient zero” was identified as an „extremely promiscuous”, gay, French-Canadian airline steward. This answer was salutary for two reasons: it gave the general US population an assurance that the US is only a victim of French-Canadian promiscuity, and it told the US population that the reason of the epidemic was a gay—not heterosexual—person. Thus, both the national identity and the dominant sexual discourse remained undamaged.

<sup>2</sup> See: Cindy Patton: *Inventing AIDS*, New York, Routledge, 1990.

significantly changed, and importantly, the general social perception necessarily included gays' own way of perceiving themselves, too, which resulted in taking conservative, moralizing, and melancholic turns/positions as social answers to AIDS (Crimp 2002; Takemoto 2003:88). As a perfect embodiment of these kinds of gay answers, Crimp mentions the HIV-positive, gay, New York Times journalist Andrew Sullivan who in his cover story "When Plagues End: Notes on the Twilight of an Epidemic" (1996) writes that:

"Before AIDS, gay life – rightly or wrongly – was identified with freedom from responsibility, rather than with its opposite. Gay liberation was most commonly understood as liberation from the constraints of traditional norms, almost a dispensation that permitted homosexuals the absence of responsibility in turn for an acquiescence in second-class citizenship. This was the Faustian bargain of the pre-AIDS closet: straights gave homosexuals a certain amount of freedom; in return, homosexuals gave away their self-respect. But with AIDS, responsibility became a central, imposing feature of gay life... People who thought they didn't care for one another found that they could. Relationships that had no social support were found to be as strong as any heterosexual marriage. Men who had long since got used to throwing their own lives away were confronted with the possibility that they actually did care about themselves..." (Cited in Crimp 2002: 6)

Sullivan here gives an image of pre-AIDS gay man which embraces the harshest heteronormative stereotypes about gay men and their lifestyle. The elementary experience of shame – that was established by the changed social perception provoked by the heteronormative, metaphorical discourse – can help us comprehend the causes of the homophobic answers to the crisis, articulated by homosexual men.

Merleau-Ponty's description about an understanding of "how vision can be brought into being from somewhere without being enclosed in its perspective" (1998 [1962]: 67) can help us here to gain a possible understanding of social perception:<sup>1</sup>

"In normal vision ... I direct my gaze upon a sector of the landscape, which comes to life and is disclosed, while the other objects recede into the periphery and become dormant, while, however, not ceasing to be there. Now, with them, I have at my disposal their horizons, in which there is implied, as a marginal view, the object on which my eyes at present fall. The horizon, then, is what guarantees the identity of the object through-out the exploration; it is the correlative of the impending power which my

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<sup>1</sup> Merleau-Ponty's example is the next-door house which he sees from a certain angle. The problem is that the house would be seen differently from other perspectives („from the right bank of the Seine, or from the inside, or again from an aeroplane"), and the house *itself* would be none of these appearances. As opposed to Leibniz's suggestion that, putting it simply, the house *itself* is „seen from nowhere", Merleau-Ponty gives us an understanding about how it is possible to acknowledge the situatedness of our view, and still prove that we are able to comprehend objects in their complexity.

gaze retains over the objects which it has just surveyed, and which it already has over the fresh details which it is about to discover.” (Merleau-Ponty 1998 [1962], 68)

We have here, therefore, three essential elements of knowing the world through vision: at first, we know that if we focus on an object, its environment will be perceived more obscurely, will be perceived as its background; second, it is due to the background and the different horizons that exist within it that we can apprehend the object our focus is on; and third, the (unconscious) recognition of these different horizons makes it possible to us to comprehend the object as a whole, and not only as a certain perspective of it.

Speaking in terms of social-sexual objects, if I see a human body, its social-sexual context—namely, the totality of all the sexual discourses—will be its background: a background the basis of which is provided by heteronormative ideology; a background which we are not conscious of but which, at the same time, shapes the body which we are conscious of. If I see a body in the sphere of the social, I will perceive it, according to the Husserlian natural attitude<sup>1</sup>, as my world (the social context in which I exist) “allows” me to perceive. Ideology shapes my world and, thus, that what my focus is on. Consequently, ideology also shapes the background around the object in my focus. Importantly, the background is perceived as the negative of the form in my focus. The borders of the focused objects are also borders of the background. Background and focused object, therefore, are interrelated; the form of the one affects the form of the other. It means that if the social background of an object changes (due to the changes of the dominant discourse) and the object does not reflect on this (as a subject), the way the object is perceived will be completely dependent on the changing dominant discourse.<sup>2</sup>

The strongly heteronormative elements of the early AIDS discourse, we can say, rearranged the unconsciously perceived social background of “gay” as a social figure; gays were no longer seen in front of the political background of sexual rights or critical lifestyle but the background of a frightening disease—a background which was set up, again, according to heteronormative ideology. AIDS discourses overwrote all of the social horizons which would have helped one to apprehend gay men as a culturally and politically active group, and instead represented new, strictly power-made horizons. Gay men were perceived, from the viewpoint of the general public, as a dangerous group of sexual deviants (their sexual “sickness” was seen as the cause of bodily sickness—AIDS).

<sup>1</sup> For Husserl, natural attitude refers to a certain process of “knowing” the world in which anything that appears as a(n) (new) object is (unconsciously) interpreted within the sphere of the *familiar* (Husserl 1969: 16). Natural attitude does not allow us to see or, in more general terms, perceive objects as *they are* but rather as they are *related to* and embedded in our already known world. In the natural attitude (any kind of) ideology keeps being hidden, first and foremost, due to its familiarity.

<sup>2</sup> ACT UP was one of the first, and most famous reflected (in terms of HIV/AIDS) gay movement which „acted up” in 1987, and significantly changed the discourse of and so the social thinking about AIDS.

Lots of gay men, however, could hardly perceive themselves anymore as a group, since the nature of their belonging to that group (e.g. their sexually and culturally subversive lifestyle) was the same quality which made them the number one public enemy. What we have here, thus, is not only a re-established border between sexual deviants and the general public, but also certain kinds of borders set up between gays themselves. For a person living with AIDS, it was only a question of time when she/he would become visibly an AIDS patient, and so when his/her social existence would be practically neglected (even if it was obvious that somebody who was living with AIDS was not gay because she was a woman or a child social responses worked according to the same kind of logic as if they were social deviants [Bersani 1988]). Visible signs (such as Kaposi's sarcoma) led to losing jobs, hemophiliac children faced expulsion from schools, and even in hospitals, an AIDS patient was not treated well (Bersani 1988, 3-9). And for all of these horrible facts, gay men were blamed (ibid.). The social life of a PWA, therefore, was really dependent on whether they were visible as an AIDS patient or not. The moment when they became visible was the same moment when they "came out" forcefully as (even if accidental) sexual deviants (Ibid.).

Their shame which resulted in the above-mentioned moralizing positions was a reflection on the newly established borders in the social sphere. The homosexual "AIDS victim" was in the center of others' interest but, at the same time, he could not take part in the process of his own social representation; he seemed to be a pure (passive) object of the general public's heteronormative gaze. The position of gay men as observed, passive objects was established by power-made, mainstream discourses, and was unintentionally re-emphasized by gay men themselves by their moralizing answers resulting from their feeling of shame.

Sartre, when he writes about the fundamental relation of "being-seen-by-another", he writes that "... to perceive is to look at, and to apprehend a look is not to apprehend a look-as-object in the world (unless the look is not directed upon us); it is to be conscious of being looked at. The look which the eyes manifest, no matter what kind of eyes they are is a pure reference to myself" (Sartre 2003 [1943], 282). For him, "I" as an ego (for myself) only exist in the world through apprehending Other's look/gaze. The Other's look gives me reflection about myself as a person which is always a being-in-the-world. Importantly, therefore, when I act somehow (in the world), I will be only conscious of myself—that I am the one who is acting somehow—if I reflect on my act which is possible only through the Other's look (in this case I will see myself as an object in the world)<sup>1</sup>. The Other's look, therefore, is a constituting element in terms of my own self. This is the basis on which we can understand Sartre's thoughts on shame: namely, that "I am ashamed of what I am.

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<sup>1</sup> The differentiation between reflected and unreflected consciousness presupposes that we recognize the *intentionality* of our consciousness—that it is always a consciousness *of* something (Husserl 1995 [1913]: 33). Therefore, we distinguish the levels of the "something"; whether, for example, it is a consciousness of a lipstick (unreflected [for Husserl "straightforward"]) or of my perception about the lipstick (reflected).

Shame, therefore, realizes an intimate relation of myself to myself' (Sartre 2006, 245), and that "I am ashamed of myself as I appear to the Other" (Ibid., 246).

When gay men were seen according to the ideologically colored metaphorical thinking of the AIDS discourse as the "promiscuous", "homosexual" causes of the horrible epidemic, they were apprehended by themselves according to this heteronormative look, which was, at that time, omnipresent. Their promiscuity and same-sex sexual object choice was equal with their socially existing self (as it was mediated in the only possible way, by being-seen-by-the-other). The Other, in this case, was embodied at the social level; the Other was, simply, the general public (represented by mainstream AIDS discourse as the normal heterosexuals who had nothing to do with AIDS). Since mainstream media continuously maintained the image of AIDS as a "gay disease", gays could not apprehend themselves in the social sphere otherwise than promiscuous and "homosexual" individuals. They were their promiscuity and/or same-sex sexual object choice. Since both of these were seen, again, as the cause of the existence of AIDS, gay men themselves were the cause of AIDS: and it was, obviously, a shameful object to be.

If we consider what Ahmed writes about shame, we can understand more accurately why the continuous maintaining of gay men's shameful situation was, indeed, a tragedy in itself (not to mention what it meant in terms of politically handling the reality of the disease itself):

"in experience of shame, the 'bad feeling' is attributed to oneself, rather than to an object other ... In shame, I feel myself to be bad, and hence to expel the badness, I have to expel myself from myself ... In shame, the subject's movement back into itself is simultaneously a turning away from itself. In shame, the subject may have nowhere to turn" (Ahmed 2004, 104).

The "bad feeling" about which Ahmed writes here, therefore, is stuck to the self through the mediation of Other's look. As I write here about a complex, more social shame (in a sense, shame is always social) where shame was felt due to an ideologically and medically criticized cultural identity, a possible solution could seem to be, for gay men, to deny, at least, some part of the "shameful" (social) identity and, at the same time, praise the viewpoint of the social Other whose look provoked the shame; this is exactly the stage where taking moralizing position can come into the picture. As Crimp notices, this process is similar to what Freud writes about melancholia as a form of introjection (Takemoto 2003, 88) where "melancholia comes from incorporating or introjecting the love object who has rejected the melancholic" (Takemoto 2003, 88). While I accept this interpretation as a possible one, I would add that the "moment" of the mentioned "rejection" was the same "moment" when shame emerged, and so the process of incorporation of, at least, some of the

hetero-norms was a more-or-less necessary, life-saving methodology for gay men, in order to escape the self-destroying shame-trap.

## CONCLUSIONS

In this article, I elaborated upon the idea that “gayness” as a politically and culturally conscious identity was used by the heteronormatively colored mainstream AIDS discourses as the describing object of people living with AIDS (PWA), and so “gayness” was relegated to the historical, medico-legal level of “homosexuality”. This metaphorical understanding of AIDS (in which PWA were the described, heretofore unknown objects, and “gay” was the describing object as the embodiment and symbol of promiscuity and same-sex sexual object choice) resulted in harmful consequences, such as conceiving AIDS as a “gay disease”, communicating to the general (heterosexual) public that they have nothing to be afraid of. The consequence I was dealing with in detail was about how social perception (in which gays were the root causes of a horrible health phenomenon) affected gay men’s perception about themselves, and how it had a role in shaping gay responses to AIDS. I argued that when the terrible social reality of AIDS (as a follower of its just-as-horrible bodily reality) occurred, gays had limited options in terms of how to perceive themselves. They, through the look of the Other (which here was embodied by the general public and all the discourses that treated AIDS as a “gay disease”) conceived themselves as shameful, and as I argued, just this shame played a leading role in their taking moralizing, melancholic positions; taking such positions, I argued, must be seen as potential life-saving acts—attempts to deny at least some elements of the shameful self. In general, and maybe most importantly, I attempted to demonstrate how, on a phenomenological basis, all social discourse has an effect on our social perception and why it is difficult to become aware of it.

## BIBLIOGRAPHY

- Ahmed, Sara. 2004. *The Cultural Politics of Emotion*. New York: Routledge
- Aristotle. 1991. *The Art of Rhetoric*. London, New York: Penguin Books.
- Aristotle. 1962. *On the Art of Poetry*, Oxford: The Clarendon Press.
- Bersani, Leo. 2010. “Is the Rectum a Grave?”. *Is the Rectum a Grave?: and Other Essays*, Chicago: The University of Chicago Press.
- Crimp, Douglas. 2002. “Melancholia and Moralism: An Introduction”, in: *Melancholia and Moralism: Essays on AIDS and Queer Politics*, Cambridge, MA: The MIT Press.
- Epstein, Steven. 1996. *Impure Science: AIDS, Activism, and the Politics of Knowledge*, Berkeley: University of California Press.
- Foucault, Michel. 1973. *The Order of Things: An Archaeology of the Human Sciences*. New York: Pantheon.

Grover, Jan Zita. 1988. "AIDS: Keywords" in: *AIDS: Cultural Analysis/Cultural Activism* (ed. Douglas Crimp). Cambridge, MA: MIT Press.

Husserl, Edmund. 1995. *Cartesian Meditations: An Introduction to Phenomenology*, Dordrecht: Kluwer Academic Publishers.

Merleau-Ponty, Maurice. 1992. *The Phenomenology of Perception*. London: Routledge.

Patton, Cindy. 1990. *Inventing AIDS*. New York: Routledge.

Rubin, Gayle. 1984. "Thinking Sex: Notes for a Radical Theory of the Politics of Sexuality". *Pleasure and Danger: Exploring Female Sexuality*. ed. Carol Vance. London: Routledge.

Sartre, Jean-Paul. 2006. *Being and Nothingness: An Essay on Phenomenological Ontology*. London: Routledge.

Shilts, Randy. 1987. *And the Band Played On: Politics, People, and the AIDS Epidemic*, St. Martin's Press: New York.

Sontag, Susan. 1989. *Illness as Metaphor and AIDS and Its Metaphors*, New York: Doubleday.

Sullivan, Andrew. 1996. "When Plagues End: Notes on the Twilight of an Epidemic", in: *New York Times Magazine*, November 10: 61-62.

Takemoto, Tina. 2003. "The Melancholia of AIDS: Interview with Douglas Crimp" in: *Art Journal*. 62 (4): 80-90.

Treichler, Paula A. 1988. "AIDS, Homophobia, and Biomedical Discourse: An Epidemic of Signification" in: *AIDS: Cultural Analysis/Cultural Activism*. ed. Douglas Crimp. Cambridge, MA: MIT Press.

Young, Iris Marion. 1989. "Polity and Group Difference: A Critique of the Ideal of Universal Citizenship". *Ethics* 99(2): 250-274.

Watney, Simon. 2000a. "Emergent sexual identities and HIV/AIDS". *Imagining Hope: AIDS and Gay Identity*. New York: Routledge.

Watney, Simon. 2000b. "Queer epistemology". *Imagining Hope: AIDS and Gay Identity*, New York: Routledge.

Weeks, Jeffrey. 2010. *Sexuality*. London: Routledge.

Weeks, Jeffrey. 1998. "The Sexual Citizen". *Theory, Culture & Society*. 15(3): 35-52

# SYSTEMS MEDICINE AND THE WAR ON CANCER A NEW MATERIALIST ANALYSIS

Maria Temmes

The request to redefine the role of materiality in social studies and philosophy is one leading trend in current scholarship. There are many terms dedicated to the excitement around the issue of materiality: new materialism, object oriented ontology (OOO), actor network theory (ANT), and speculative realism being probably the best-known references. Though these fields hardly represent homogeneous viewpoints, they all differentiate themselves from previous scholarship on the basis of their perspective on material ontology by highlighting the impossibility to view materiality and culture as distinct analytical spheres. As Iris Van Der Tuin and Rick Dolphijn emphasize in their article “The Transversality of New Materialism” (2010), the aim of new materialism is to formulate a cultural theory that would not emphasize the role of culture over materiality by seeing it as a discursive creation, nor support a positivist natural science view of matter that could be used as a basis for essentialist and deterministic argumentation. Instead, they highlight the need to talk about meaning production as material-discursive, meaning that while social relations do shape the way in which materiality is perceived, matter itself also takes active part in its materialization (Van Der Tuin & Dolphijn 2010, 153-159).

The question of ontology as it emerges in recent scholarship is not only a metaphysical quandary to be discussed over a nice glass of red wine, but it is also seen as a viewpoint that can help to approach contemporary material phenomena, such as climate change, as well as to better connect with scientific research studying these phenomena. One interesting area of scientific research for new materialists has been systems biology since it was born out of demand to consider organisms as dynamic networks.<sup>1</sup> In this article, I will elaborate on the connectivity between systems biology approach to cancer research and new materialism through a close reading of Michael R. Hendrickson’s article “Exorcizing Schrödinger’s Ghost: Reflections on ‘What Is Life?’ and Its Surprising Relevance to Cancer Biology” (2011). I will argue that the vision of the body that contemporary cancer research maintains, which highlights bodily dynamism, complexity, and emergence, is consistent with the new materialist approach to material ontology. However, keeping in mind the new materialist demand on considering knowledge production as material-discursive, I argue that the metaphor of war against cancer, which is still prevalent when talking

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<sup>1</sup> As Evelyn Fox Keller points out, “systems biology” functions as an umbrella term to describe new approaches in biological research that, instead of focusing on particular units in the body such as “genes”, studies organisms as complex systems, which are also open to environmental factors. See Keller 2005

about cancer research, has a danger of reducing the complexity of this account. By offering a reading on how the war metaphor could be considered as anthropocentric, I will argue that this metaphor does not do justice to the systems biology approach and contemporary cancer treatments. I will suggest, instead, that challenging this metaphor might open up new ways to envision contemporary cancer research.

## **NEW MATERIALISM, SCIENTIFIC RESEARCH, AND SYSTEMS BIOLOGY**

New materialism is a direction in current scholarship that wishes to consider matter as an active participant in meaning production. The term was launched both by Rosi Braidotti and Manuel DeLanda independently in the 1990s to claim a move away from the nature/culture dichotomy in social science. As Samantha Frost points out, the nature/culture dualism was largely criticized by the cultural turn. However, while criticizing the artificiality of this binary division, the cultural turn emphasized the role that culture always had in the knowledge of materiality. Since this often lead to a view of passive matter over which cultural meanings are placed, new materialists try to create a new approach, a new lexicon, to talk about materiality. As described by Frost,

[New materialists] try to specify and trace the distinctive agency of matter and biology, elucidate the reciprocal imbrication of flesh, culture, and cognition, investigate the porosity of the body in relation to the environment in which it exists, and map the conditions and technologies that shape, constrain, and enhance the possibilities for knowledge and action ( Frost 2011, 74).

Diana Coole and Frost state in the introduction of the book *New Materialism* (2010) that one source of inspiration for the creation of new materialism has been the development of the natural sciences in the twentieth-century. They argue that, for example, creations of the chaos and complexity theories in the field of quantum physics have inspired a demand for a new ontology of matter that would replace a vision of substantial material *being* with an image of transformative, fluid and open-ended material *becoming* (Coole & Frost 2010, 10-11). Coole and Frost highlight that the ontological vision of matter that highlights complexity, fluidity, and open-endedness is gaining importance also in the area of molecular biology. They point out that especially since the completion of the Human Genome Project (HGP) the study of organisms has increasingly implemented the vision of the body as a complex system that is also affected by its environment. This was because the HGP revealed that humans have a relatively low number of genes in their bodies, which lead researchers to question how genes operate in a genome-wide context and, thus, they started to approach organisms as complex networks. Coole and Frost name systems biology as one instance of research that has applied an ontological vision of

fluid matter to the study of organisms. In other words, for Coole and Frost, systems biology functions as an example of the limits of genetic research that many scientists had to face during the late twentieth century, which led to the new directions in molecular biology (Ibid., 15-18).

Michael R. Hendrickson points out that new directions in molecular biology have influenced cancer research as well. In his article, he traces the history of cancer research from the beginning of the twentieth century to the present. He states that what influenced cancer research greatly was a move away from classical genetics to molecular genetics in 1950s. Erwin Schrödinger and his lecture “What Is Life?” in 1943 played a big part in this change since Schrödinger disassociated his research questions from classical genetics that was based strongly on quantitative experiments that studied the relation between genotype (innate traits) and phenotype (visible characters). While numerous scientists, such as Mendel in his pea cross-breeding experiment, Thomas Hunt Morgan in his fruit fly lab experiment, and Hermann Joseph Muller via radiation studies, tried to understand the relation between genotype and phenotype, the definition of gene remained unidentified (Hendrickson 2011, 53-58). As Morgan noted in his Nobel speech in 1933,

There is no consensus of opinion among geneticists as to what genes are – whether they are real or purely fictitious – because at the level at which genetic experiments lie, it does not make the slightest difference whether the gene is a hypothetical unit, or whether the gene is a material particle (Morgan cited in Ibid., 55).

In other words, while “gene” was used to describe an elementary unit of heredity, genetic research did not aim to study genes as such. Schrödinger went against this tradition by asking not how the concept of the gene could be used to describe life but how scientists could study “the physico-chemical basis of heredity” in other words, the gene itself (Ibid., 58). Hendrickson points out that Schrödinger’s lecture was influential for scientists who started to explore the molecular basis of genetics. This research culminated in the revelation of the structure of DNA by James Watson and Francis Crick in 1953, starting what Hendrickson calls the “heroic age of molecular biology” (Ibid., 61). The central dogma of this age, according to Hendrickson, was the definition of important entities of heredity, such as DNA and RNA, and linear causality that connects these entities together. Consequently, this dogma supported genetic reductionism by situating genes at the center of scientific research on heredity (Ibid., 61-65).

Hendrickson states that during the 1970s, the molecular genetic approach started to influence cancer research since recombinant DNA technology enabled scientists to test cancer theories at the molecular level. Before the 1970s, the term “cancer” was used to describe hundreds of different diseases that were all characterized by an uncontrolled cell growth, and cancer was seen as a cellular disease. Hendrickson

notes, however, that “from the beginning of the 1980s a consensus formed that cancer was due to abnormalities in a small family of genes that were thought to be responsible for transforming a normal cell into a malignant cell, which then went on to produce a clinically detectable tumor” (Ibid., 66). While cancer research revealed different kinds of genes taking part in the development of cancer in addition to main oncogenes, such as tumor suppressor genes, Hendrickson argues that cancer research still maintained the reductionist character of contemporary molecular biology by assigning hierarchical and linear causality between lower and higher level properties. This was changed by the postgenomics of the 21<sup>st</sup> century that challenged the reductionist basis of molecular biology (Ibid.; 66-67, 77-78).

As noted by Coole and Frost, the HGP was one thing that forced scientists to reconsider the foundations of molecular genetics. HGP surprised many by revealing that the number of genes in the human body was much lower than anticipated, which led to the conclusion that genetic diversity was mainly due to complex genome-wide interactions (Rheinberger 2010, 165). However, as Hendrickson notes in his article, scientists had started to challenge the gene-centered approach in the study of the organism already in the 1980s when more and more information about the complex networks within the genome came to light. Hendrickson calls this new approach “Post-Schrödingerian Perspective” (PSP) and defines it as a viewpoint that “takes levels of organization very seriously” but highlights networks instead of linear relations. Thus, PSP is different from the previous molecular genetic view of the organization of the organism since

There is no privileged level of examination or explanation ... The usual discourse of cause and effect doesn't work for networks. For the simplest network, a circle, we have a chicken-and-egg problem; each is jointly cause and effect. The PSP is *holistic* rather than reductionist. It is not genocentric but locates agency at *all* levels of organization, none of which are privileged. It is, in short, *organism-centered* (Hendrickson 2011, 77-78).

When considering the focus on networks, the holistic approach and organism-centered viewpoint, it becomes understandable why the new materialist scholars wish to highlight the changes that have been happening in molecular biology since the 1980s. I elaborate this point by offering a reading on the ways in which PSP resonates with the assemblage theory created by Gilles Deleuze and Félix Guattari, which has been an important inspiration for scholars such as Braidotti and DeLanda.

Deleuze and Guattari use the term “assemblage” to describe framework with which to understand the world that is chaotic in all its complexity and dynamism but simultaneously comprehensible due to a “rhythm [that] is the milieu’s answer to chaos” (Deleuze & Guattari 1988, 313).” This means that while one cannot define stable, unchanging territories in the world, the concept of assemblage allows one to

analyze a territory as a coming together of different elements. In other words, it is possible to define certain elements that constitute an assemblage in a given time. However, these components are shaped by both internal and external relations, and, thus, they cannot themselves be considered as unchanging (Ibid., 315-317). The organism-centered PSP seems to be based on a similar principle, since Hendrickson highlights that “new properties emerge at each level of organization, and these can be causally effective both at their own level and at lower organizational levels” (Hendrickson 2011, 77). This statement, together with the previous quotation from Hendrickson, shows that the definition of causality needs to be rethought in relation to PSP. Manuel DeLanda’s article “Emergence, Causality and Realism” (2011) can help to elaborate the definition of causality.

DeLanda’s notion “mechanism of emergence”, similarly to the Deleuzian assemblage, describes a complexity that is not a “seamless totality” but, instead, possible to be divided into singularities (De Landa 2011, 384)<sup>1</sup>. The causality in this emergence, still, cannot be explained as a linear relation between these singularities. Instead, causality comes to represent a “space of possibilities” that can be defined in the limits of the “mechanism of emergence”, taking into consideration the singularities within the mechanism without letting the mechanism dictate that singularities should perform in a definite manner (DeLanda 2011, 387-389). When connected to assemblage theory, this vision of causality helps to picture assemblage as a collection of definable, but not stable, elements that all contribute to the territorialization of the assemblage. However, the dynamism of elements, their relation with one another as well as assemblage’s connection to other assemblages, makes it impossible to impose linear causality to the emergence of assemblage. This framework of assemblage, I argue, is dominant in PSP as well. As Hendrickson argues “PSP emphasizes the necessity of considering *context, emergent properties, and the importance of the relationship of parts in constructing the whole*” (Hendrickson 2011, 49). The fact that PSP resembles greatly assemblage theory becomes less odd when knowing that both PSP and Deleuze were influenced by similar scientific theories, such as Ilya Prigogine’s theory of dissipative systems (Ibid., 82-86)<sup>2</sup>.

As systems biology is one example that Hendrickson gives of PSP, it is clear that systems biology is based on similar material ontology as highlighted by many new materialists. However, when talking about the connections between scientific research and new materialism, which considers the material-discursive basis of meaning production, it is important not only to consider the material ontology but also how this ontological view shapes scientific practices. This is important especially since scientific practices are often considered to be reductionist within cultural studies. Deleuze and Guattari, for example, argue in their book *What Is Philosophy?* (1994) that science and philosophy have different kind of connection with the immanent world

<sup>1</sup> DeLanda’s thoughts have been largely influenced by Deleuze and, for example, his book *A New Philosophy of Society: Assemblage Theory and Social Complexity* (2006) elaborates on the possibility to use assemblage approach in social studies analysis.

<sup>2</sup> For an account of how contemporary science affected Deleuze’s philosophy, see May 2005.

largely due to the scientific methods. Whereas philosophy is able to grasp and understand the immanent world through abstract concepts, science cannot accomplish this since its aim is not to describe the world as such but to locate particular functions in the world in order to answer its questions. Inevitably, this search of functions ends up stabilizing particular variables, thus losing the grasp of the world's dynamism (Deleuze & Guattari 1994, 118). However, systems medicine<sup>1</sup> seems to offer a different kind of vision of scientific research.

Hendrickson states that one reason why systems biology research has taken root in biomedical research is because after PSP it “became clear that to explain cell-level, organ-level, and organism-level function would require putting the molecular pieces of this Humpty Dumpty back together again in a way that preserved their original topology” (Hendrickson 2011, 87). What is interesting in this statement is that it represents scientific research as mapping biological organisms rather than tracing a specific source of explanation. Therefore, systems biology seems to fulfill Deleuze’s and Guattari’s requirement for acceptable methods when approaching assemblage: “the tracing should always be put back on the map” (Deleuze & Guattari 1988, 13). Still, what it means to implement this kind of method within cancer research poses a more difficult question that I will address by focusing on the metaphor of war against cancer often used when describing cancer research.

## WAR AGAINST CANCER

Hendrickson highlights that the emphasis on organism-wide networks that PSP supports made it obvious how difficult it is to control and cure cancer. This is because cancer was now seen not only as individual-based, but research also highlighted that “there does not appear to be a single, specific, fixed stepwise progression from normal cell to malignant cell in most types of adult cancer” (Hendrickson 2011, 94). Also, cancer started to be considered as a “microecological system” where cancer cells not only communicate with one another but with, for example, blood vessels, immune cells, and fibroblasts. Hence treatment targeted at cancer cells might destroy a majority of cancer cells, but since cells are different, it is possible that some cells gain immunity to the drug and, thus, cancer recurs (Ibid., 94-95). Thus, Hendrickson concludes his article by stating: “unfortunately, for the foreseeable future, successes in *the war on cancer* will continue to be measured by incremental advances in prevention and in early diagnosis, which is amenable to conventional nontargeted therapies” (Ibid., 103). While the war reference in Hendrickson’s text is used to highlight the struggles that contemporary cancer research faces, I argue that this metaphor can be considered problematic when explaining the systems medicine approach to cancer and current practices in cancer treatment. I will elaborate this point by highlighting how new materialist scholarship has criticized anthropocentrism and suggesting that this criticism might be useful also when analyzing discourses around cancer research.

<sup>1</sup> Here I differentiate between systems biology and systems medicine, which is used to describe medical practices that utilize systems approach, for example, when designing drug combinations in the treatment of cancer.

Levi R. Bryant notes in his book *The Democracy of Objects* (2011) that contemporary philosophy emphasizes epistemology over ontology by placing the human at the center of inquiry. This anthropocentrism causes that “claims about being are claims about being for humans” (Bryant 2011, 35). Similarly, Donna Haraway notes that disease studies create a vision of disease as “a process of misrecognition or transgression of the boundaries of a strategic assemblage called self ... what counts as a ‘unit’, a one, is highly problematic, not a permanent given. *Individuality is a strategic defence problem*” (Haraway 1991, 212). Considering individuality in relation with the boundaries for defence in disease studies clearly suggests that defining the boundaries of the human is a starting point from which a disease is defined. Moreover, the language of war, as a *defence* of individuality, supports this human-centered approach to disease.

As Claire Colebrook states, theories about humans have been based on binary sexual difference that has also shaped the ways in which appropriate couplings have been analyzed. As Colebrook notes,

The fear of sexual indifference – a circulation, exchange and proliferation beyond bounded forms – is precisely that which has imprisoned human species within its logic of self-enclosing sameness ... By only admitting the lived differences of bounded kinds we have been unable to consider the difference of lifelines and force lines beyond our purview (Colebrook 2012, 181).

Colebrook’s argument is directed against theories that assume the prevalence of sexual difference in a changing world. However, in my mind it also describes well how the connection between humans and cancer is often described: as an unnatural coupling that needs to be broken apart – hence the war against cancer. This is a problematic statement, I argue, for two reasons. Firstly, the assumption that cancer is a definite element attacking the human body is misleading in the light of new scholarship, since it conceals the multiplicity of elements and their complex networking within the human body. As Alphonso Lingis reminds us: “our bodies are coral reefs teeming with polyps, sponges, gorgonians, and free-swimming macrophages continually stirred by monsoon climates of moist air, blood, and biles” (Lingis 2003, 167). In other words, the systems biology approach to cancer should be regarded as a contextual network that is also open to environmental influences. This leads me to a second problem I have with anthropocentrism: the question of the agency of cancer.

If cancer is described as an enemy within an anthropocentric worldview that posits cancer as a participant in an unwanted coupling, it is hardly preposterous, in a world where selfish genes are still part of popular discourse, to assume that this framework entails a question of the aims of cancer. In other words, while cancer is seen as an unwelcome invader, the metaphor of war seems, additionally, to define

cancer via the human perspective, in the sense that the human is seen as a distinct entity invaded by an external thing. This externality of cancer shapes its assumed agency as well, highlighting its will to spread despite the harm caused to the human body.<sup>1</sup> This assumption goes against the principles of emergence, described by Manuel DeLanda and supported by systems biology, since in this account it seems that the mechanism (the human body) dictates the function of the singular element (cancer) – though in a negative way in this example. This is not to say that the cancer research could not identify distinct elements that take part in the spreading of cancer, control and even destroy them. However, as Lingis points out, little of the movements inside of the human body are teleological and even “every purposive movement, when it catches on, loses sight of its teleology and continues as a periodicity with a force that is not the force of the will launching it and launching it once again and then once again; instead it continues as a force of inner intensity” (Lingis 2003, 168). Thus, the more cancer develops, the more difficult it is to control or destroy it.

While I wish to use anthropocentrism as a conceptual tool to critically analyze war against cancer discourse, I want to emphasize that my aim is not to argue that systems medicine approach would not aim to cure cancer or to identify singular elements that take part in maintaining and developing cancer. I argue, however, that the human-centered viewpoint can obscure the understanding of the ways in which these singular elements come to be and how they emerge within the human body as an assemblage. As Bryant highlights, within the anthropocentric framework, “being can only be thought in terms of what Graham Harman has called our *access* to being” (Bryant 2011, 35). In other words, when considered via war terminology, cancer research becomes a quest for identifying and destroying cancer. However, this is an example of a case which “is characterized by primacy of epistemology over ontology” (Ibid., 34). As an alternative viewpoint, Bryant presents Roy Bhaskar’s notion of scientific research that would not posit humans as “monarchs of being but instead among beings, entangled in beings, and implicated in other beings” (Ibid., 40). This would require not considering which methods would help to locate a certain agent (such as cancer) but, instead, building up methods that would best adapt to ontological reality (Ibid., 47). Bruno Latour’s analysis of the experiments with ferment done by Louis Pasteur helps to expand this point.

One of the main messages that Latour gives in his account of Louis Pasteur’s work is that science studies need to abandon the assumption of a dichotomy between speaking human and mute world (Latour 1999, 140). Instead, Latour suggests considering scientific experiment, which aims to locate an unknown reason for a particular action, as an event that consists of three different trials. In the first one, scientists need to identify the action they are studying and the research object that takes part in this action. After this, scientists need to represent their findings to their colleagues to test their analyses. Finally, they present the findings to their scientific

<sup>1</sup> One such account was published in Finnish journal Helsingin Sanomat in August 24, 2013 with a vision of humanized cancer evident already in the title “cancer cell that refuses to die” (Rough translation. Original: “Syöpäsolu, joka ei suostu kuolemaan.”)

community that will or will not consider the results as correct. Latour highlights that what is essential to understand in this event is that while the scientists are the ones who name the action they are studying, the actor of the story changes after the first trial to be the research object itself. This is because in order for the scientists to prove their findings to others, the research object cannot be a product of the artificiality of the laboratory (Ibid., 122).

This requirement of non-artificiality of the identified material object leads Latour to state that the lactic acid ferment, which Pasteur identified with his experiments, is independent of human construction while at the same time it has no existence outside the work done by Pasteur. It then follows, according to Latour, that experiment should not be considered negatively as an artificial context but rather as something that can allow material objects to exist (Ibid., 139). While Latour's argument might sound even contradictory, it is graspable when considering his main criticism towards the tendency to draw a strict line between humans and the world: while it might be the scientists who create the artificial stage for the object to exist, scientists do not create the objects of their studies. As such, Latour's example illustrates how scientific research can be seen to posit ontology prior to epistemology: even though the scientific experiment would fail to adapt to the material ontology it aims to study and thus misidentify the research object, the experiment or the scientific community would inevitably point this out. This is not to say that what scientific community dictates is the truth — after Thomas Kuhn's analysis of scientific community and “normal science” hardly anyone would argue that — but that scientific experiment, even when its aim is to locate a certain agent, does not inevitably equate as reductionist.

In short, I have wished to point out how the ‘war against cancer’ discourse can create a view of cancer research as anthropocentric, and that this poorly represents a systems medicine approach to cancer. What is more, within the framework of war, Hendrickson's dispiriting conclusion is well put: instead of glorious victory over the enemy, the success of cancer research can only be “measured by incremental advances in prevention and in early diagnosis” (Hendrickson 2011, 103). However, I would like to suggest that disconnecting the assumed success of cancer research from the metaphor of war might help to better explain how the systems biology approach can and has influenced cancer treatment.

## **SYSTEMS BIOLOGY AND A NEW APPROACH TO SCIENTIFIC PRACTICES**

Within the framework of ontology-oriented research, I would like to return to the question of how the systems medicine approach to cancer research could be connected with the ontological basis of systems biology. As stated previously, systems biology approaches cancer as an emergence of a multiplicity of singularities in genome-wide context. If the aim of the research and treatment is to defeat cancer, as military metaphors lead us to envision, this complexity often results in defeating

outcomes, especially if cancer has had time to spread. While I do not want to dismiss the importance of the aim of curing cancer altogether, I argue that focusing on this aspect of research can hide the fact that the individualized approach to cancer, supported by the systems medicine approach, means also that a lot of research is dedicated to balancing the bodily functions during cancer not only to secure treatment but also to offer a better life quality with cancer and less invasive treatments. I argue that it is this side of the research that is done in co-operation with clinics, and is often left without much hype, where the systems medicine approach can show its strengths since treatment requires comprehending the bodily states and trying to adapt medication and other treatments according to this. For example, kidney dysfunction might require additional drinking of liquids.<sup>1</sup> While this kind of treatment can also be seen in a framework of war against disease in a broader sense, the metaphor of war in its anthropocentrism seems to prevent the possibility to understand, by creating a vision of cancer as an independent enemy, cancer as something that *is* the body with which cancer patients live.

While it might be difficult not to place curing cancer as the main aim of cancer research, I argue that seeing treatment development as a “second prize” in cancer research can also obscure one crucial element in systems medicine approach — the entanglement of theory and practice. As Evelyn Fox Keller points out, biological research has long been based largely on the experimental study of organisms and has avoided the formation of broader theories that would explain biological functions. Keller states that such an approach differentiates biology from physics, where theory and practice have more easily fused together in fields such as quantum physics (Keller 2002, 1-3). Keller sees systems medicine as research that brings together different scientific disciplines, such as mathematics, biology, chemistry, and computer science and thus “the net effect [of this co-operation] is the beginning of an entirely new culture that is at once theoretical and experimental” (Keller 2005, 7). New treatment plans are an essential part of this co-operation as a site where questions of ontology are brought into research practices. Thus, I wish to challenge the war against cancer discourse not only because it can produce an anthropocentric view on cancer but also because it offers a poor representation about what is actually occurring in current research, since developing new treatment plans can be considered a part of knowledge production that can provide better understanding of the dynamism of cancer. I suggest that critical approach to this metaphor is needed in order to comprehend different kinds of aims that are associated with cancer research and that utilize systems biology approach.

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<sup>1</sup> In a similar manner, while not a cancer study, an interesting study was published few days ago (January 11, 2014) in *Helsingin Sanomat* about a medical study done in Kuopio University that proved that certain food products can help to slow down the development of Alzheimer’s disease since they provide nutrients that the disease is consuming.

## REFERENCES

- Bryant, Levi. 2011. *The Democracy of Objects*. Ann Arbor: Open Humanities Press.
- Colebrook, Claire. 2012. "Sexual Indifference," *Telemorphosis. Theory in the Era of Climate Change*. Ann Arbor: Open Humanities Press.
- Coole, Diana & Frost, Samantha. 2010. "Introduction," *New Materialism: Ontology, Agency, and Politics*. Edited by Coole, Diana & Frost, Samantha. Durham & London: Duke University Press.
- DeLanda, Manuel. 2011. "Emergence, Causality and Realism". *The Speculative Turn: Continental Materialism and Realism*. Edited by Levi Bryant et al. Melbourne: Re.press, 381-392.
- Deleuze, Gilles & Guattari, Félix. 1998. *A Thousand Plateaus: Capitalism and Schizophrenia*. Minneapolis: University of Minnesota Press.
- Deleuze, Gilles & Guattari, Félix. 1994. *What is Philosophy?* New York: Columbia University Press.
- Frost, Samantha. 2011. "The Implications of the New Materialisms for Feminist Epistemology," *Feminist Epistemology and Philosophy of Science. Power in Knowledge*. Edited by Heidi E. Grasswick, London & New York: Springer.
- Haraway, Donna. 1991. *Simians, Cyborgs, and Women. The Reinvention of Nature*. London: Free Association Books.
- Hendrickson, Michael. 2011. "Exorcizing Schrödinger's Ghost: Reflections on 'What Is Life?' and Its Surprising Relevance to Cancer Biology," *What Is Life? The Intellectual Pertinence of Erwin Schrödinger*. Edited by Hans Ulrich Gumbrecht et al. Stanford: Stanford University Press.
- Hird, Myra. 2009. "Feminist Engagements with Matter," *Feminist Studies* 35(2): 329-346.
- Keller, Evelyn Fox. 2002. *Making Sense of Life: Explaining Biological Development with Models, Metaphors, and Machines*. Cambridge, Mass.: Harvard University Press.
- Keller, Evelyn Fox . 2005. "The Century Beyond the Gene," *Journal of Bioscience* 30: 3-10.
- Latour, Bruno. 1999. *Pandora's Hope. Essay's on the Reality of Science Studies*. Cambridge, Mass.: Harvard University Press.
- Lingis, Alphonso. 2003. "Animal Body, Inhuman Face," *Zoontologies. The Question of the Animal*. Edited by Cary Wolfe. Minneapolis: University of Minnesota Press.
- May, Todd. 2005. "Gilles Deleuze, Difference, and Science," *Continental Philosophy of Science*, edited by Gary Gutting. Malden: Blackwell Publishing.
- Sontag, Susan. 1998. *AIDS and its metaphors*. London: Allen Lane.
- Van der Tuin, Iris & Dolphijn, Rick. 2010. "The Transversality of New Materialism," *Women: A Cultural Review*, 21(2): 153-171.
- Wilson, Elisabeth. 2002. "Biologically Inspired Feminism. Response to Helen Keane and Marsha Rosengarten, 'On the Biology of Sexed Subjects'," *Australian Feminist Studies*, 17(39): 283-285.

# BIOTERRORISM, SMALLPOX AND RACE: THE BIO-POLITICS OF MASS VACCINATION

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A bioterrorist attack utilising smallpox would deliberately seek to sow public panic, disrupt and discredit official institutions and shake public confidence in government (O'Toole 1999, 540). A mass vaccination approach may well be implemented in response to such an attack in the US (Henderson et al. 1999, 1282). Trust and cooperation must be present for the effective distribution of vaccines, and further, official actions will prime the conditions for future expectations and reactions (O'Toole et al. 2004, 30). This essay will outline the issues which may result from any mass vaccination policy—a political strategy which intervenes in the biological dynamics of the population, to protect against the emergent threat of smallpox at the molecular level.

## FOUCAULT AND THE EXERCISE OF POLITICAL POWER

Foucault begins his lecture series—*Society Must Be Defended*—by asking whether the “binary schema of war and struggle, of the clash between forces, can really be identified as the basis of civil society, as both the principle and motor of the exercise of political power (Foucault 2004, 18)”. The question to be explored is whether war can be understood as the historical principle behind the workings of power. In answering this, Foucault carries out a genealogy outlining the different ways in which war is utilised within grids of historical intelligibility. Key to this approach is the move away from an analysis of sovereignty and law in trying to understand the workings of power. In doing so, this genealogy can be read as setting out the different rationalities and forms of knowledge which justify and legitimise the use of violence or force outside of those conceptualised in sovereign or juridical terms.

One way in which history is made intelligible in seventeenth century Europe is through the idea that the war going on beneath order and peace is race war. Termed the discourse of history, the investigation of race war, driven by antagonistic social groups, separated by language and ethnic differences, offers up a counter history to the unity of sovereignty in understanding the way power is established and the forms of truth that are deployed (Ibid. 215). The counter discourse of race struggle, speaking from the side of the defeated, offers up an effective history of the marginalised contra to the traditional history of the victors (Foucault 1998, 380). In so doing, the continuity of the traditional understanding is relentlessly disrupted. This way of

understanding history demonstrates that kings and laws have concealed the fact that they were born of the contingency of battles. The authority giving rise to the knowledge and truth of traditional history is exposed as artificial, igniting the revolutionary will to rekindle the war between races that once went on and which is still going on (Foucault 2004, 72 -79).

For Foucault, the discourse of history that utilised race war as a grid of intelligibility to understand political relations became pacified. A new understanding emerges which conceptualises relations of force in civilian terms. The war between races, the war for domination, is replaced by a struggle and rivalry towards and over the universality of the state. This civilian struggle both within the State and for the State's institutions now becomes the driver behind the discourses of right and truth. This understanding of history eventually leads to the strict curtailment of war's function as an analyser of historico-political processes. The French Revolution becomes the final episode in a violent war for domination whose aims are now inverted in a struggle over the content and expression of the state. War is eliminated from historical analysis by the principle of national universality, a potentially repressive and exclusionary national ideal (Neal 2004, 394). This successive grid of understanding then both complements and inverts the primal duality of the grid focused on race war and domination (Foucault 2004, 226-7).

A third schema for understanding war as the exercise of political power emerges with the totalitarian states of the twentieth century. A new science of the state—statistics—highlighted the dynamics and regularities of the population which could be measured and managed. This new form of knowledge gave rise to a new form of power—biopower—which seeks to intervene through political strategies in the random biological element inherent in a population of living beings—biopolitics—so as to optimise a state of *life* (Ibid., 246). This new power to "make" live and "let" die complemented the old right of the sovereign to take life or let live. Biopower, focused on man as species, intervenes in the population to make live, to improve life by eliminating accidents, for example. Death is moved beyond the reach of power (Ibid., 241-248).

State racism, in coordination with new forms of biological knowledge such as evolutionism, creates caesuras within the population and positions one element as a threat to another and justifies killing so as to improve the biological life/purity and well-being of the other. Killing then is justified on the grounds that it will result in the elimination of the biological threat to and the improvement of the species or the race (Ibid., 255-256). State racism legitimises the use of the sovereign power to kill that would seem to have been outlawed in a political system centred on promoting the health and welfare of the population (Foucault 2009, 105). Further, the positioning of the state as the protector of the population pacifies the struggle over the constitution of the state. The racist state further inverts the revolutionary discourse by positioning the state as the protector of one race against other races positioned as biological threats.

The Nazi state demonstrates the link between developments in scientific knowledge set out in evolutionism and biological theory and a correlative discourse of power (Foucault 2004, 256). War is the logical extension of the claim to be the superior race. In Foucault's genealogy we have then distinct discourses of power that evolve in correlation to new forms of understanding and knowledge. Discourse joins together power and knowledge generating discontinuous segments whose tactical function is neither uniform nor stable, demonstrating its tactical polyvalence (Foucault 1998, 100-102). A discourse of race against sovereign power is transformed into a discourse of race for sovereign power (Lemke 2011, 44).

## **BIOTERRORISM AND EMERGENCE AT THE MOLECULAR LEVEL**

Whereas Foucault was concerned with the ways knowledge understood and power affected the population, greater knowledge of life at the molecular level has opened up new understandings and interventions. In the 1950s microbiologist René Dubois coined the term "emergence" to describe the temporality of biological evolution as a relentless process in which there is no final equilibrium as there is no assignable limit to the co-evolution of resistance and counter proliferation, emergence and counter emergence (Cooper 2008, 78). This understanding of life, particularly the highly accelerated process of bacterial evolution through horizontal communication, has influenced the "biological turn" in US defence policy. This turn, which sees infectious disease outbreaks and bioterrorism as identical threats, conflates public health, biomedicine and war under the sign of the emerging threat, both natural and manmade. The doctrine of mutual deterrence has been replaced by full spectrum dominance, counter proliferation and pre-emption (Ibid., 75-77).

The creation of Project BioShield and the Biomedical Advanced Research and Development Authority (BARDA) – organisations whose sole goal are the creation of medicines to counter the threat of bioterrorism – can be seen as a response to this emerging threat. Indeed, biological weapons, with their ability to spread without detection, to incubate and produce delayed effects, are capable of transforming emergence into the ultimate military threat (Ibid., 88). The drive to create and stockpile vaccines is the logical activity of a defence strategy which legitimates the use of pre-emptive action against an emergent threat<sup>1</sup>, to survive the future by becoming immersed in its conditions of emergence, to the point of actualisation (Cooper 2008, 89). In order to deal with the threat of a bioterrorist attack using smallpox, the Center for Disease Control (CDC) has stockpiled enough vaccine to protect the entire population of the US.<sup>2</sup>

## **EFFECTIVE DISTRIBUTION OF VACCINES**

<sup>1</sup> Office of Homeland Security. (2002). The National Strategy for Homeland Security. Washington DC, The White House, p. ix.

<sup>2</sup> bt.cdc.gov. (2007). Smallpox Fact Sheet: Vaccine Overview. Available from: <http://www.bt.cdc.gov/agent/smallpox/vaccination/facts.asp> [Accessed the 18th of April 2014]

Gaining the cooperation of the public is essential to the effective distribution of vaccines in dealing with any smallpox attack. This has been noted by table top exercises such as *Dark Winter* and *Atlantic Storm*, which played out the consequences of a smallpox attack in the US and the North Atlantic region respectively. In *Dark Winter*, public cooperation was noted as being derived from the belief that the vaccine and other scarce resources were distributed fairly and that containment measures were for the good of society (O'Toole, Mair & Inglesby 2002, 982). *Atlantic Storm* identified effective communication with publics to persuade them to take effective action as a key recommendation (Smith et al. 2005, 265). A Working Group focused on governance during response to bioterrorism has also argued that successful governance and leadership during an act of bioterrorism will depend upon the cooperation of an engaged and trusting public facilitated by effective communication (O'Toole et al. 2004, 26).

There are a number of historical examples that may impact the level of cooperation and trust present in the US public when dealing effectively with a bioterrorist attack. One example is the response to the anthrax letters of 2001. Upon learning that laced letters had been sent to two Democratic senators in Washington, the Hart Senate office building was shut down and decontaminated for five months (Guillemin 200, 175-6). In contrast, despite evidence that the letters had leaked spores, postal facilities that had processed the letters were kept open until a cutaneous case of anthrax was diagnosed in a facility in New Jersey and three workers were hospitalised from a facility in Washington with two eventually dying (Ibid., 176-7). Central to these deaths was a failure to communicate the risks the workers were exposed to, a failure to describe the symptoms to look out for and a failure to communicate clearly with physicians to be on the watch for any patients from postal facilities (Ibid., 177). African American postal workers felt betrayed by the United States Postal Service, the public health authorities in the District of Columbia and the CDC in dealing with this event (Eisenman et al. 2004, 147).

Studies have also found that African Americans demonstrate a greater distrust of physicians, researchers and the health care system generally compared to whites (Ibid., 152). This may have been influenced by the history of racial discrimination and exploitation by the medical profession dating back to the pre-Civil War period and the use of freed and enslaved African Americans for brutal and non-consensual medical experimentation (Ibid.). A frequently cited example is *The Public Health Service Tuskegee Syphilis Study on Untreated Syphilis in the Negro Male*, in which federally funded investigators observed African Americans through the natural course of syphilis and withheld available treatment (Gamble 1997, 1773). This was conducted for forty years from 1932-1972, on 399 men from Macon County, Alabama (Ibid.). This study has also been pointed out as predisposing many African Americans to distrust medical and public health authorities, with critically low Black participation in clinical trials and organ donation. The fear of experimentation and genocide generated by this study has also been used to explain why African Americans opposed needle exchange

programs for HIV/AIDS prevention in New York City (Eisenman et al. 2004, 152). It has also been noted that poor and disenfranchised populations already distrust standard vaccines for hepatitis B and influenza and that this is likely to influence vaccine acceptance in a bioterror attack (Ibid.).

In addition to these examples of institutional and personal discrimination and abuse is the response to Hurricane Katrina in 2005. The social catastrophe that emerged from what was originally a natural disaster left hundreds of thousands of mainly poor African Americans stranded and isolated for weeks (Giroux 2007, 306). It has been argued that the black bodies that were left to rot and decay literally laid bare the racial and class fault lines in American society and demonstrated the emergence of a new kind of politics in which entire populations are considered disposable (Ibid., 307). Following the National Guard's intervention in the aftermath of Hurricane Katrina, President Bush concluded that the armed forces should be granted greater legislation for action during catastrophic events (Cooper 2008, 95). Despite the repeal of Bush's expansion of military power through amendments to the Posse Comitatus and Insurrection Act<sup>1</sup>, in 2009 the Obama Administration placed 20,000 regular Army troops under the command of the US Army Northern Command (NORTHCOM).<sup>2</sup> The first active unit of the regular army to be under the command of NORTHCOM, possibly illegally assigned, will respond to potential chemical, biological, radiological, nuclear and high-yield explosive (CBRNE) incidents in the US.<sup>3</sup>

The examples cited may be significant factors in reducing the trust and cooperation of African American and poor communities in dealing with a smallpox attack. The military response to such an event may well implement forced quarantine and isolation on uncooperative populations (Cooper 2008, 95). The dangers that can arise in such a situation were highlighted in the natural smallpox outbreak in Milwaukee, Wisconsin in 1894. Discriminatory policies of home quarantine for the middle and upper classes and forced removal and isolation for the poor, in combination with the distrust of vaccines, led to resistance from poor communities, a complete breakdown in civil order and a month of rioting, which increased the spread of smallpox and led to many unnecessary deaths (Leavitt 2003, 185-7). As this example demonstrates, unless the public is convinced it is receiving fair treatment, equitably applied, it will resist public health policy instead of supporting it (Ibid., 192).

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<sup>1</sup> GovTrack.us. (2008). H.R. 4986 (110th): National Defense Authorization Act for Fiscal Year 2008. Available from: <https://www.govtrack.us/congress/bills/110/hr4986> [Accessed the 15th of April 2014]

<sup>2</sup> Wolverton, J. (2009). "Barack Obama Continues Bush Administration Policy Regarding Posse Comitatus", The New American. Available from: <http://www.thenewamerican.com/usnews/politics/item/2775-barack-obama-continues-bush-administration-policy-regarding-posse-comitatus> [Accessed the 11th of April 2014]

<sup>3</sup> Rothschild, M. (2012). "What is NORTHCOM up to?" The Progressive. Available from: <http://www.progressive.org/rothschild0209.html> [Accessed the 15th of April 2014]

## CONCLUSION

The biopolitical security strategy of mass vaccination set out to protect and enhance the welfare of the population, implemented militarily and backed by the forced isolation and quarantine of resistant populations, threatens to bring into sharp focus the marginalised knowledges of the African American community and the racist history of public health institutions and its practitioners. Such forms of knowledge recall acts of violence which hold the authority of these institutions to be illegitimate. The call for trust and cooperation in response to a smallpox attack, the exercise of power backed by the threat of violence, necessarily open up a space for resistance (Foucault 1983, 220-1)—a resistance motivated by these marginalised knowledges and the illegitimate authority of these institutions, which in turn motivates subjects in the legitimate exercise of power and violence outside of those conceptualised in sovereign or juridical terms, severely restricting vaccine distribution and uptake efforts and threatening the further spread of smallpox. We have resistance in opposition to a biopolitical security tool which is also resistance to the social and political forces (Neocleous 2008, 7) behind this policy whose malevolence and racism is brought to light through it—a resistance shaped once again by a discourse on race against power conceived in sovereign and juridical terms.

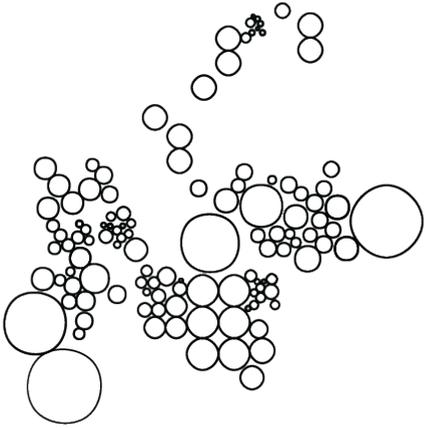
## REFERENCES

- bt.cdc.gov. (2007). *Smallpox Fact Sheet: Vaccine Overview*. Available from: <http://www.bt.cdc.gov/agent/smallpox/vaccination/facts.asp> [Accessed the 18th of April 2014]
- Eisenman et al. 2004. "Will Public Health's Response to Terrorism be Fair? Racial/Ethnic Variations in Perceived Fairness During a Bioterrorist Event", 2 (3) *Biosecurity and Bioterrorism*. 146-156.
- Foucault, Michel. 2009. *Security, Territory, Population*. Basingstoke, Palgrave Macmillan.
- Foucault, Michel. 2004. *Society Must Be Defended*. London: Penguin.
- Foucault, Michel. 1998. "Nietzsche, Genealogy, History", in Faubion, J. D. (ed.) *Michel Foucault: Aesthetics, Method and Epistemology*. London: Penguin.
- Foucault, Michel. 1998. *The Will To Knowledge*. London: Penguin Books.
- Foucault, Michel. 1983. "The Subject and Power", in Dreyfus, H. L. & Rabinow, P. *Michel Foucault: Beyond Structuralism and Hermeneutics*. Chicago: University of Chicago Press.
- Gamble, V. N. 1997. "Under the Shadow of Tuskegee: African Americans and Health Care", *American Journal of Public Health*. 87 (11): 1773-1778.
- Giroux, H. A. 2007. "Violence, Katrina and the Biopolitics of Disposability", *Theory Culture Society* (24): 305-309.
- GovTrack.us. 2008. H.R. 4986 (110th): National Defense Authorization Act for Fiscal Year 2008. Available from:

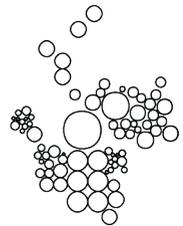
- <https://www.govtrack.us/congress/bills/110/hr4986> [Accessed the 15th of April 2014]
- Guillemin, Jeanne. 2005. *Biological Weapons: From the Invention of State-Sponsored Programs to Contemporary Bioterrorism*. New York: Columbia University Press.
- Henderson et al. 1999. "The Looming Threat of Bioterrorism". *Science*, 283: 1279-1282.
- Leavitt, J. W. 2003. "Public Resistance or Cooperation? A Tale of Smallpox in Two Cities", *Biosecurity and Bioterrorism*, 1 (3): 185-192.
- Lemke, Thomas. 2011. *Bio-politics: An Advanced Introduction*. New York: New York University Press.
- Neal, W. N. 2004. "Cutting off the King's Head: Foucault's *Society Must Be Defended* and the Problem of Sovereignty". *Alternatives*, 29: 373-398.
- Neocleous, Mark. 2008. *Critique of Security*. Edinburgh: Edinburgh University Press.
- Office of Homeland Security. 2002. *The National Strategy for Homeland Security*. Washington DC, The White House.
- O'Toole et al. 2004. "Leading during Bioattacks and Epidemics with the Public's Trust and Help", *Biosecurity and Bioterrorism*, 2(1): 25-40.
- O'Toole, T., Mair, M., & Inglesby, T. V. 2002. "Shining Light on "Dark Winter"", *Clinical Infectious Diseases* 34: 972-983.
- O'Toole, Tara. 1999. "Smallpox: An Attack Scenario", *Emerging Infectious Diseases*. 5 (4): 540-546.
- Rothschild, Matthew. 2012. "What is NORTHCOM up to?". *The Progressive*. Available from: <http://www.progressive.org/rothschild0209.html> [Accessed the 15th of April 2014]
- Smith et al., 2005. "Navigating the Storm: Report and Recommendations from the *Atlantic Storm Exercise*". *Biosecurity and Bioterrorism*, 3(3): 256-267.
- Wolverton, Joe. 2009. "Barack Obama Continues Bush Administration Policy Regarding *Posse Comitatus*", *The New American*. Available from: <http://www.thenewamerican.com/usnews/politics/item/2775-barack-obama-continues-bush-administration-policy-regarding-posse-comitatus> [Accessed the 11th of April 2014]

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# **(BIO)POLITICS**



# THE POLITICS OF LIFE

Florian Geisler and Carina Klugbauer

The philosophy of life is a paradigm which has pushed the vocabulary of so many scientific disciplines such as biophysics, biochemistry and bioeconomy to name but a few towards an appreciation of the complexities of life itself. While generating a lot of deep insights into the workings of modern societies, has also produced a number of deadlocks and even paralyzing effects in contemporary social thought. In the following, we want to outline two of the most problematic phenomena in social philosophy which were largely fueled by the analytical paradigm of the life-itself: a) the demise of freedom and subjectivity as normative categories as prepared by the studies on governmentality and biopolitics by Michel Foucault and b) the theory of the constitutive difference of bios and zoé by Giorgio Agamben.

## STAGES AND PARADIGMS

Foucault distinguishes three paradigms or stages of power mechanisms in societies: During a first stage of sovereign power, a state governs over territory; it imposes an at least allegedly neutral and equal legal framework and is not so much involved in what is happening within this framework. In the second stage, a more detailed form of state administration surfaces and begins to not only set a passive legal framework but tries to intervene more directly into the structure of population and culture. In a third paradigm of biopolitics, societies start to step regulation up a notch and begin not only to control, but to create social entities, subject positions and cultural meanings altogether by implementing incentives for self-disciplining and normalization.

While Foucault conceptualized these three stages as parallel to each other and only slowly shifting from one to another since the 15<sup>th</sup> century and without ever replacing each other completely, his ideas are often adapted in a much more narrow and deterministic way. Social thought which relies upon Foucault very often precisely does not claim that these shifts call for slow-paced adjustments in political agendas over centuries, but is much more likely to position itself as a political alternative or even counterpart to interventions which took place a mere 30, 50 or 100 years ago and were not exactly dominated by constitutional-monarchic or liberal-bourgeois frameworks, but by Marxist and workers-movement approaches. There lies a certain peculiarity in this recent development of social theory: Biopolitics is seen as the new and only paradigm that slowly replaces the 'classical' forms of political regulation through state power and a legal system. Scholars who are claiming the primacy of the biopolitical sphere and who are building their social critique upon that assumption, are at least implicitly presuming that social critique of classical forms of politics is somewhat superfluous and not up to date. This shift has already been

documented in great detail (Lemke 2011, 6), and manifests itself usually in the guise of the split between affirmative and critical biopolitics. While affirmative biopolitics embraces new forms of genetic, communications and social technologies as a means to create new approaches to politics, critical biopolitics tends to fight back against this trend of dissolving traditional frameworks and insists that there is a unifying principle behind those trends which needs to be uncovered. This relates also to the status of biopolitics as either stage or paradigm of history: even though Foucault's theory does not imply a chronological succession of classical political forms through biopolitics, this model is widely used in a linear way of almost an unfolding of history—defining new means of political intervention.

This development has its roots already in Foucault's analysis of liberalism and subjectivity as forms of modern socialization. In his lectures on *The Birth of Biopolitics*, Foucault debunks the liberal subject and its imperative "Be free" as precisely not the realization of a freedom-oriented ethics, but as a means of constructing actors who function within a market economy. Freedom, he claims, is not produced as an end in itself, but as a needed good which liberal economy consumes (Foucault 2004). It is implied that this model of freedom and subjectivity is somehow untrue because it is "merely" constructed. Aside from what Foucault himself wanted to pursue with this line of argument, it is evident that he today is read precisely in this sense: that the liberal subject, that bourgeois freedom is "just" another form of domination and control. However, this position very drastically neglects that liberalism indeed did develop a significant force by which feudal forms of socialization were deconstructed. Furthermore, this position also neglects Marxist approaches with their own critique of liberalism: in decentering the topics of freedom, liberation and self-conscious subjects as always already integrated into mechanisms of regulation, this type of critique *formally* targets liberalism but *effectively* undermines other forms of social critique which are operating with concepts of liberation and development of subjectivity, which acknowledge not a necessary, but a possible line of progressive politics. Two trends in social theory reinforce each other in a fatal way at this point: On the one hand the trend to conflate the liberal subject with the Marxist critique of the subject. On the other hand the praxis of attributing sovereign and disciplinary power to earlier, biopower to later forms of capitalism, consistent with Foucault or not.. For example, Antonio Negri claims that "when Foucault starts to work on the shift between the end of the XVIIIth century and the beginning of the XIXth century, ... he is actually confronted with a kind of power relations that are completely articulated on the development of capitalism (Negri 2004)."

We have thus far identified two problems: First, there seems to be a split between affirmative and critical approaches to biopolitics. Second, there seems to be substantial confusion on the status of biopolitics in the development of history: while Foucault developed the term as one paradigm of control among others, contemporary analysis tends to employ biopolitics as immediate alternative to Marxist forms of social critique.

How can we address these problems? Our intuition would be that they do not stem from theoretical shortcomings—rather we have to deal here, oddly enough, with a question of style and self-understanding. We might remind ourselves that the Foucauldian turn of social critique can be defined as a reaction to the crisis of Marxism (Lemke 2011, 59)—Foucault’s analysis of power as an epiphenomenon of a ruptured left. Similarly, we can see the recent disproportionate emphasis on biopolitics and the philosophy of life-itself in general as marking a specific form of theoretical escapism: a search for a completely new and revamped framework of social thought as a means to flee traditional lines of inquiry, at any cost. How high the cost is can best be demonstrated in the works of Giorgio Agamben.

## ESCAPING BARE LIFE

Agamben discusses the topic of universal human rights in terms of the life-itself in the guise of the Antique Greek distinction between *zoé* and *bios* (i.e. bare life and politically qualified life, with the former having no value for society unless bound to the latter). This original distinction which separates *zoé* from *bios* and binds the latter to the political sphere while excluding the former from the public life and banning it into the private sphere is, according to Agamben, the political paradigm which still pervades our political thought in modernity. The political sphere is then paradoxically defined through what it is not—the exclusion of the body. *Zoé* is therefore the original point of reference for every politics. “In Western politics, bare life has the peculiar privilege of being that whose exclusion founds the city of men (Agamben 1998, 12).”

Agamben thus rejects Foucault’s claim that biopolitics slowly replaces sovereign forms of regulation and instead stresses the inherent connection between the two. For Foucault, biopolitics as a form of power that takes the life itself as its object becomes the new form of ordering social relations, while sovereign power becomes less important; for Agamben the two modes of power are inherently connected. The biopolitical focus of the state does not signify a break towards modernity, but is instead the very founding moment of politics based on exclusion. What is indeed new in the modern state is a radicalization not of the biopolitical, but of the sovereign paradigm, which in turn leads to an increase in biopolitical modes of governance.

In his book “State of Exception” (2005), Agamben comes to this conclusion by linking the idea of life-itself with Carl Schmitt’s model of sovereign, as the entity which can declare the state of exception. Any juridical, according to Schmitt, needs a constitutive state of exception to guarantee social rules. Consequently, the distinction between *zoé* and *bios*, as social order, also needs the state of exception. The problem then arises that, for some reasons, states tend to not only take this as a hypothetical possibility but to assign actual people to the subject position of being either part of *bios* or *zoé*—being a citizen or a non-citizen, a *homo sacer*. In modernity, however, the distinction between rule and exception itself tends to be blurred, which makes up the inherent similarity of democratic states and fascism, claims Agamben:

in both, any person's rights depend on the state of exception. Therefore Agamben wants to get rid of the basic structure of rights and legal systems altogether.

However in *Homo Sacer* he argues that this dangerous foundation of modern nation states can be seen best when we have a look, at the legal structure of human rights. According to Agamben human rights in modern nation states are inherently flawed because they are just citizens rights, which means one needs to be a citizen to be protected by them, while precisely the non-citizens would be in dire need for its protection. But Agamben completely misses the specific properties of civil rights as he fails to recognize that they have never been granted by humanist grace, but are the outcome of a certain social constellation or ongoing struggle. Instead of analysing the specific place of international refugees in this struggle, he stylizes them as a new revolutionary subject for the 21st Century. The problem for refugees, obviously, is not that they are in the same condition as the citizen, but that they are not in the possession of a civil status. By discussing human rights in terms of the life-itself and the state of exception, Agamben is rather blurring the problem. Instead of maybe asking why certain refugees (and also certain citizens) do not have the same rights as "full" citizens and finding solutions to giving them said rights, he insists on the similarity of the two sides—a very cynical and detrimental paradigm for political reasoning. The problem culminates in various moments, for example when Agamben compares the phenomenon of gated communities to the situation in locked refugee camps and assesses that they are structurally the same. Agamben loses any ground for acknowledging the huge classed, racialized and gendered differences between deliberate inhabitants of a gated community and the forced inmates of a refugee camp. In the end, Agamben's vision of a whole new version of politics, socialization and true human rights just amounts to a radicalization of Carl Schmitt's initial program: preparing society to accept not only the indirect authoritarian rule of democratic socialization but for the direct rule of bare life, the *zoé*-fication of society, so to speak. It amounts to a complete depolitization of the social (Marchart 2010, 236).

## **A FEW CONCLUSIONS**

We can now draw a few simple conclusions about the rise of the topic of life-itself within social inquiry. The discourse of biopolitics and its protagonists, consciously or not, seem to be forcefully confronted with capitalist power relations. Foucault's endeavor to make power techniques socially intelligible similar to the way in which Marx made exploitation visible, shows itself as twofold: On the one hand, it finds a legitimate ground to formulate an alternative to the critique of political economy. On the other hand, the status quo of political economy (i.e., capitalism) does not even allow power relations to appear as any other than relations of exploitation—this is why scholars are constantly compelled to equate paradigms of power with stages of capitalism. This shows us that we have to see biopolitics as tool for the critique of ideology on micro-levels; it is necessarily embedded in a framework which cannot

simultaneously deconstruct liberalism, Marxism, subjectivity etc. without losing ground for normative statements altogether. The alternative that we see in Agamben, who does the exact opposite (namely discussing biopolitics as a transhistoric movement) as a starting point for rejecting the political and legal systems of modernity, is very prone to give in to its calamitous contradictions—to formulate theories of messianism, mysticism and escapism. All these mentioned difficulties call for increased efforts in reflecting the gaps between materialist and foucauldian analysis of power mechanisms.

## **REFERENCES:**

- Agamben, Giorgio. 1998. *Homo Sacer: Sovereign Power and Bare Life*. Stanford: Stanford University Press.
- Agamben, Giorgio. 2005. *State of Exception*. Chicago: The University of Chicago Press.
- Foucault, Michel . 2004. *The Birth of Biopolitics*. Basingstoke: Palgrave Macmillan.
- Lemke, Thomas. 2011. *Biopolitics. An Advanced Introduction*. New York/London: University Press.
- Lemke, Thomas. 2011. *Eine Kritik der politischen Vernunft*. Hamburg: Argument.
- Marchart, Oliver. 2010. *Die Politische Differenz*. Frankfurt a.M.: Suhrkamp.
- Negri, Antoni. 2004. *A contribution on Foucault*. <http://www.generation-online.org/p/fpnegri14.htm>.

# BREAD AND CIRCUSES: THE SPECTACULAR TECHNOLOGY OF ‘BARE LIFE’ IN *THE HUNGER GAMES*

Fani Cettl

It might be no more than a coincidence that Giorgio Agamben starts from the figure of *homo sacer* in ancient Roman law to theorize the modern logic of political sovereignty and that the recent novel trilogy *The Hunger Games* by Suzanne Collins and its film versions rely on Roman gladiator games to channel ideas about totalitarian decisions on human life. However, I will argue in this essay that the political universe depicted by *The Hunger Games* and the biopolitical theories of Giorgio Agamben—for which he takes his cue from Michel Foucault—can mutually inform one another. In other words, I will try to read the two film sequels *The Hunger Games* (2012) and *Catching Fire* (2013), adapted from the novels (and with two more sequels announced that will cover the narrative of the final novel in the trilogy) from a biopolitical perspective. I will follow Agamben’s understanding of biopolitics as a political decision through which sovereign power decides which life can be killed and thus manages life/death, as linked historically both in Agamben and *The Hunger Games* to the sovereignty of the modern nation-state. Relatedly, modern science and technology come to play a crucial role in deciding on life/death, and therefore in the second part of the essay, I will look at how in Agamben and the Hunger Games political universe we can associate the management of death with a particular modern technological development—technology of the “spectacle”, as a certain management of attention. Views on the notion of spectacle as a historical development in the sound-vision media will be discussed in order to consider the link between a management of death haunted by totalitarianism and contemporary liberal democracies, a move which both Agamben and the films make in offering a critique of contemporary capitalist political economy.

Let me start with an outline of the Hunger Games political and economic structure and the main narrative line. The story takes place in a dystopian future state called Panem, which covers the North American continent after some catastrophic events destroyed the society as we know it. The state is governed from the luxurious and technically advanced city Capitol which, led by a dictatorial President, rules over 12 poorer districts that are exploited as producers of goods. The levels of poverty between and within the districts vary, and in District 12 some people even starve. An original 13th district was destroyed 74 years before the beginning of the story in an unsuccessful rebellion. As a punitive and cautionary outcome of this, the Capitol installed a decree that every year a boy and a girl aged 12-18, so called “tributes”, are to be picked out or “reaped”, from each district to fight to death in a specially

produced arena and a televised reality show called Hunger Games, until only one victor remains.

We learn of this history of the Hunger Games early on in the first film, from a little propaganda film screened on the day of the reaping in District 12, where we are also following the main character Katniss, who will choose to volunteer as a tribute in the Games in place of her younger sister who is chosen by the lottery. This early event already gives us a taste of how lives are politically and ideologically managed in Panem: the reaping is staged as a collective event secured by the police, with a striking contrast between the hyper-extravagantly dressed presenter on the podium (who is to give us a sense of the abundant but decadent life in the Capitol) and the coal-mining District 12 inhabitants dressed in bleak and grey tones (who embody the poverty of the working classes, and also the predominantly male labour in the coal mining industry). The propaganda film informs us that “a nation” and “a people” are to be defended against any further possible rebellions, and to commemorate that, Hunger Games are considered “a pageant of honour, courage and sacrifice” for the tributes involved. But how can we understand this operation of the state sovereignty, which under the banner of honour and sacrifice isolates certain lives from their immediate material contexts in order to be killed for the benefit of a people? Agamben's work can help disentangle this relation between sovereign power and life.

## **THE PRODUCTION OF BARE LIFE BY THE MODERN STATE**

In *Homo Sacer* (1998) Agamben scrutinizes the figure of *homo sacer* from Roman law, who is an exile from the city and can be killed by anyone without committing a murder, but cannot be sacrificed in a ritual dedicated to the gods. This paradoxical legal status puts him therefore outside both human and divine laws, but at the same time includes him in these laws precisely through the exclusion (a possibility to be killed and not sacrificed). Agamben considers this relation between life and law, of being included through exclusion, a primary political operation through which life becomes included in a juridical order. What is at the heart of this relation is a notion of “sacredness”—an operation through which “life” becomes detached from its immediate material social forms of life (eg. worker, daughter, etc.) and becomes what Agamben calls “bare life”—marked solely through its political relation to sovereign power as a possibility to be killed. *Homo sacer*, historically expelled onto the outskirts of a Roman city, in western modernity comes to dwell permanently in the city, in the body of each citizen through the notion of the rights of “man” and their installment in the modern nation-state (an abstraction of “man” as that which is captured in its relation to law). To discuss this, Agamben relies on Michel Foucault's (1976) notion of “biopolitics” as a modern form of governing developed towards the end of the 18th century which aims to manage biological life of a population or people and is tied to the notion of the nation-state. The classical sovereign right to kill comes to be in modernity somewhat reconfigured—as a right to take care of or improve the life of the population or state citizens, but its management of death certainly does

not go away. For Foucault, modern biological racism is the mechanism through which the biopolitical state unleashes its right to kill. This is absolutely radicalized in the historical Nazi state, in which taking care of the biological People coincides perfectly with the eugenic treatment and killing of bodies that are marked as biologically inferior people.

A juxtaposition of this historicization of biopolitics and the Hunger Games politics reveals that the state of Panem is a curious mix of references to both ancient and modern histories. According to a quick Google search, Suzanne Collins, the author of the novels, is cited to have found inspiration from watching reality TV which started to unsettlingly blur with footage of the invasion of Iraq, as well as from the Greek myth of Theseus<sup>1</sup> and the Roman gladiator games. Thus for example, before the tributes enter the deadly arena, they ride in chariots along a monumental Roman-like track, cheered by the colourful audiences who seem to subscribe to the *Panem et circenses* ideology (Latin for “bread and circuses”), only to be greeted by the President from his elevated, and sinisterly fascist, speech podium surrounded with the Panem flags. What is crucially modern about this is that the whole pageant as well as the Games itself are televised. The studio interviews with the tributes mimic the *Big Brother* reality show procedures, and the arena is, in the manner of *Survivor*, a bounded piece of outside geography (woods, water surfaces), in this case designed and absolutely technologically managed by the game operators who easily induce fires, poisoned fogs or genetically engineered creatures in order to prescribe life/death in the ways they see fit to stage a spectacular show.

In this cross-historical staging of politics, we can read Agamben's operation of the modern state sovereignty isolating through a decree the bare life of the tributes, who are made killable in a reality TV game show, as a sacrifice for the people. Managing life of “a people” thus also presupposes managing deaths of certain people—the lower class kids from the districts—but ultimately is about managing everybody. One of the crucial moments in the first film is when a girl named Rue from District 11, with whom Katniss made friends in the arena, is killed by another tribute. Katniss does not accept her life as expendable but instead mourns her death, and then stares directly at the camera raising her hand as a sign of solidarity with District 11. This triggers a riot in District 11 and also turns Katniss into a symbol of a budding social rebellion. The President's response to this is to make clear to the main game producer, Seneca, that he is to control the game and thereby suppress any social dissent, because he “likes him”, marking him also as bare life to the state. And by the end of the film, for his failure to manage the game outcome and thus contain social unrest, Seneca will be made to commit suicide.

## HOW IS BARE LIFE INCLUDED WITHIN THE CITY?

“Where there is bare life, there will have to be a People - on condition that one immediately add that the principle also holds in its inverse formulation: Where there

<sup>1</sup> The Athenian Theseus slew the creature Minotaur in the labyrinth on Crete to which the defeated Athenians had to send every number of years seven boys and seven girls to be devoured.

is a People, there will be bare life.”(Agamben 1998:179). Agamben sees an inherent fracture in the modern biopolitical management of a people, which produces in a single stroke also excluded bodies. He comes to trace the meanings of “people” in modern European languages, pointing out that on the one hand, it designates a unified political body, but on the other, it designates members of the lower classes—poor, inferior or excluded. Historically, Agamben argues, in ancient Rome there was a clear division between *populus* and *plebs* with their distinct institutions and magistrates, while ever since the French Revolution, “people” has become a sole referent of sovereignty, which comes only together with a marked presence of excluded bodies within the city. He sees the biopolitical projects of modern nation-states as an attempt to create a single and undivided people, which opens a fracture through which bodies can be marked as biologically unfit in various ways (raced, pathologized, etc.) and made expendable. And for Agamben, a radicalization of this is the Nazi state which strove to produce a racially undivided people, thus not being able to tolerate the presence of those who could not be integrated within the city and placing them in a special localization for the included exclusion of bare life—the camp.

In the Panem biopolitical economy, the crucial social divide on which the capitalist totalitarian state is based and which it radicalizes is not the historical racial one (and the society is in this regard represented in the films as diverse) but rather the class difference— between the rich Capitol elites and the poor district labourers. Furthermore, particular bodies from the districts are made killable—young female and male bodies aged between 12 and 18—in other words, kids in their formative educational age through which they are to enter the capitalist marketplace. And the education of kids in the richer districts (Districts 1, 2 and 4), closer to the Capitol spatially and ideologically, consists of physical training as a preparation for the killing game in the arena, which they consider an opportunity for wealth and fame. It is also interesting to consider the arena as a material space into which the state of Panem isolates young, working and lower class, bare life (although, as I already noted, all lives are potentially bare to the state). For Agamben, the paradigm of the modern localization of bare life is the camp, in its totalitarian historical specificity on the one hand, but on the other, as a modern political structure which erupts each time bare life is to be given a material localization. In this sense we could think of the function of the Hunger Games arena as a technologically spectacularly produced space of the inclusive exclusion—including bare lives from the districts in the Capitol city by excluding them into a certain location. One of the tributes, Johanna, in the second film, angrily observes in the arena that “you cannot put everyone in here”, which means that the state isolates specific bare lives into the space of a reality TV arena in order to preserve the existing political order.

To think just for a second cross-historically as *the Hunger Games* attempt, it would be interesting also to look into the historically specific space of the gladiator arena and the public spectacle through which the ancient Rome was managing expendable

life within the city—but it is not my intention to do this here. On the other hand, the notion of “spectacle” as linked specifically to the modern technology of television is something that I would like to consider more. Reality TV is a technology in the films through which the totalitarian Capitol manages poverty and death, and it is also a technology specific to contemporary capitalist democracies, which witnessed an explosion in the popularity of reality TV in the late 1990s. In my view, both the films and Agamben indicate this crossing between the management of death haunted by totalitarianism and contemporary liberal capitalist technologies—to which let me turn more.

## TECHNOLOGY OF THE SPECTACLE

Modern technology is absolutely crucial to the management of life/death in the Hunger Games society: high tech trains and aircraft, bioengineering, total technological manipulation of the game arena, televised game show—all deployed by the Capitol. Timothy Campbell (2011) has argued that, in order to fully unpack Agamben's account of how modern state sovereignty produces bare life and, crucially, how contemporary capitalism continues to do so, it is necessary to foreground the role of technology in this. Campbell argues that Agamben, in his views on technology, somewhat too easily collapses the historical specificity of the Nazi technological manipulations of life for the purpose of eugenics, into a rather universalizing view of how contemporary capitalist democracies produce docile and inert bodies through technologies such as “proliferation of spectacles” (Campbell 2011, 61). Campbell points out that the “spectacle” for Agamben puts docile bodies in capitalism at danger of a sovereign right to kill potentially being unleashed and turning them into bare life.

Agamben discusses the spectacle in the volume of essays *Means Without End* (2000), commenting on Guy Debord's notion of the “society of spectacle” (1967) and understanding it in the following way: “The becoming-image of capital is nothing more than the commodity's last metamorphosis, in which exchange value has completely eclipsed use value and can now achieve the status of absolute and irresponsible sovereignty over life in its entirety, after having falsified the entire social production.” (Agamben 2000, 75) Agamben offers a Marxist analysis of how capitalism expropriates productive activity from its use value, and also considers that this alienates language from what he calls its common use or communicability. He argues that the contemporary spectacle is an extreme form of the expropriation of language, which obscures that language is the very possibility of communicability rather than some assumed content of a sign. Discussing Debord's notion of the “integrated spectacle” (1988), as particularly relevant to the post-1989 unification of the deployments of spectacle in eastern socialist states and in western capitalist states, Agamben briefly mentions a specific technology which plays a major role in this unification—television. In other words, we could say that for Agamben, the “integrated spectacle” is primarily *televised*. He further claims that this contemporary

“spectacular-democratic regime” is the final stage in the evolution of the modern state form, towards which both tyrannies and democracies, racist and progressive states are all heading (Agamben 2000, 85). On the one hand, the integrated spectacle still activates modern national identities, but on the other, it organizes into a kind of supranational police state in which the norms of international law are constantly broken.

Agamben’s brief mention of television, and his conceptualization of the spectacle as an alienation of language from communicability in the sort of post-state contemporary moment are fairly abstract at this point. Can we unpack more precisely the technologies associated with the spectacle historically, and what is its relation to the state?

## **A VERY BRIEF HISTORY OF THE SOUND-VISION MEDIA**

Jonathan Crary (1989) has looked into the historical technological developments behind Debord’s idea of the society of the spectacle, asking whether the spectacle is a useful concept to think how power functions noncoercively in the 20<sup>th</sup> century modernity. Crary understands the spectacle as linked to a historical moment when sign-value of a commodity on the level of fashion, advertising and communication comes to take precedence over its use-value, and is interested in when that historical moment occurs. After considering the developments of mass consumption in the 1870s, Crary picks up a cue from Debord, who made a brief reference to the 1920s but did not elaborate on it. Crary argues that there were significant developments happening in the 1920s which started to organize perceptual consumption in new ways and constructed a new kind of observer. These are the technology of television, developing with the links to corporate, military and state control; and the technology of sound film, developing in the context of corporate film industry. The integration of sound and vision demanded a new kind of attention from the viewer, and it was different from both the radio and the early silent cinema. Crary argues that “the full coincidence of sound with image, of voice with figure, not only was a crucial new way of organizing space, time, and narrative, but it instituted a more commanding authority over the observer enforcing a new kind of attention” (Crary 1989, 102). While on the one hand, somatic mechanisms of attention were being targeted by corporate advertising, social theorists such as Walter Benjamin were criticising such standardization of perception by calculated technologies embedded within the power hierarchies.

These calculated technologies developing since the 1920s, Crary continues, also meant a link to the rise of fascism and later Stalinism and the ways in which these regimes deployed the sound-image propaganda to manage bodily attention to their own ends. The Nazi party, which already relied predominantly on the radio propaganda, also considered that TV should promote national cohesion centered on the image of the Führer and had in mind mass TV viewings, in contrast to the corporate model of molecularized home viewing for the maximization of sale profits.

Relatedly, Crary notes, Debord spoke of the “concentrated” spectacle of the totalitarian regimes and the “diffused” consumption of spectacle characteristic of the USA, and he saw the two as eventually collapsing into an “integrated spectacle” that has taken over the entire social production of perception—which is a diagnosis on which Agamben relies.

Furthermore, Crary asks whether the spectacle as a modern technology of power relates in any way to Foucault’s ideas about surveillance in *Discipline and Punish* (1975). Foucault there contrasts the spectacle as an ancient management of bodies, and the panoptic technology of surveillance as particular to modernity. While in antiquity the public spectacle (in temples or theatres) was making accessible to many people a small number of objects, thus emphasizing public life, in modernity bodies are organized in a way to provide for a small number of people a view of a great multitude, managing the relation between individuals and the state. Foucault sees the panoptic mode of power as developing in the late 18<sup>th</sup> century, remarking that “our society is one not of spectacle, but of surveillance” (Foucault 1975, 217). Crary, however, thinks that if Foucault had perhaps thought more about television, it might not have been difficult for him to consider TV as a further perfecting of panoptic technology (Crary 1989, 105). The ways in which the technologies of surveillance and spectacle can manage bodies and organize attention are for Crary not opposed, but could be read in ways in which they in modernity collapse into one another in a more effective disciplinary apparatus, as in TV technologies that monitor the viewers’ behaviour.

## HOW DO THE HUNGER GAMES MANAGE ATTENTION?

In the previous section I introduced briefly Crary’s genealogy of the sound-vision film and TV media, possible slippages between what is considered liberal and totalitarian state deployments of those and between their spectacle and surveillance modes, in order to understand better Agamben’s views on the televised spectacle as a technology in which contemporary democracies and sovereign management of death happily meet: “(...)the spectacular-democratic world organization that is thus emerging actually runs the risk of being the worst tyranny that ever materialized in the history of humanity,” (Agamben 2000, 86).

*The Hunger Games* films certainly share this depressing diagnosis of the contemporary capitalist spectacle. The management of viewing the Hunger Games reality TV show is an absolutely crucial method through which a capitalist prescription of poverty/luxury and a totalitarian deployment of death come to perfectly coincide, and in which spectacle and surveillance merge into one another, as Crary proposed these disciplinary technologies might. That capturing attention is the key is nicely encapsulated in an exchange between Katniss and the character Gale in the beginning of the first film, when he notes that if no one watches, they do not have the game, to which she replies that it is simply not going to happen. Attention of the Capitol audiences is thus all consumed in fashion styles, lavish parties, and the entertainment

of supporting your favourite tributes in the show. What is in it for the young district contestants (apart from death) is that the sole victor is awarded wealth with which they can support their family and friends, and they become huge celebrities in the Capitol. For this purpose, youngsters in the richer districts train in special schools and volunteer for the Games, undergoing thus the reality TV kill-to-success education. Another major reality show management of attention in the first film is that of a “young love” between Katniss and Peeta, the male tribute from her district, deployed by Katniss to gain them the audiences’ support; but also deployed by the state in the end to paint the decision to pronounce them both victors as a triumph of young love (and not due to their defiance). However, the attention of the district viewers is not particularly diverted, and Katniss’s acts of defiance in the arena come to trigger instances of social unrest.

To quell the emerging unrest, in the second film Katniss and Peeta, in their televised post-victory tour of the districts, are made to give convincing politically appropriate speeches so that people “forget what the real problems are”, as Katniss’s mentor Haymitch remarks. However, as such script is becoming implausible for the resisting districts, the state police is becoming blatantly murderous, and the spectacular technological infrastructure quite smoothly turns into its surveillance mode in which the districts are carefully monitored and Katniss’s every movement is inspected by the President himself. The game producer Plutarch concocts an attention strategy the President finds brilliant: the television screens are to switch back and forth between shots of Katniss’s supposed obsession with her dresses and wedding, and those of public floggings and executions of agitators, so that the districts fear even more but also stop perceiving Katniss as a symbol of the rebellion. When even this fails to discipline the districts’ attention, the Capitol decides to reap tributes for the upcoming 75<sup>th</sup> Games from the existing pool of victors as to eliminate them. Significantly, Peeta’s last effort to stop the Games is to say in a live studio broadcast that Katniss is pregnant, but even the reproductive dimension of their heterosexual love which could reproduce the national body at this point does not halt the state decision to kill.

By the end of the second film, however, the rebellious tributes and their helpers will manage to completely divert the attention of the President and start a successful rebellion by beating the Capitol at its own game: by taking control of the arena technology and in this way also the televised spectacle. This is done quite literally, when Katniss fires an arrow charged by a lightning produced in the arena into the arena dome, smashing the whole structure to pieces and turning all the viewers’ screens throughout Panem to black. What will ensue from this is only yet to be seen in the next film.

## **RETHINKING POLITICS**

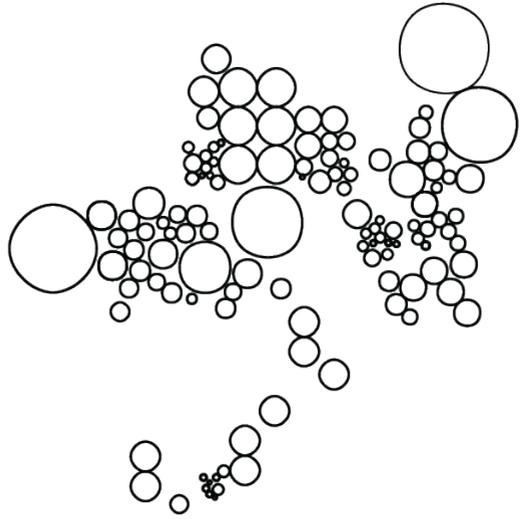
Agamben on the other hand, will also see in the contemporary spectacle a possibility for different politics, but for him this will not involve a resistance against

the state as in the *Hunger Games* narrative. He argues that the contemporary spectacle at the same time alienates language from its communicability *and* also produces in a new, massive way, the very experience of language as pure communicability or the fact of speaking. Instead of some assumed language content or proposition, communicability refers to the experience of being-in-language of human beings as “pure mediality” (Agamben 2000:58), and the contemporary spectacle is specific for producing this. Agamben links this experience of language to the production of what he calls “singularities”—forms of life without any condition of belonging to the state nor claiming a state identity (Agamben 2000, 86). The spectacle is then, on the one hand, a final stage in the state form which alienates language, but on the other—and crucially—a dissolution of the bond to state identity and to language as preformed content. In this dissolution from the state belonging Agamben reads the possibility of a community of singularities not haunted by the state sovereign right to kill. From this Agamben will go on to rethink what politics itself might mean. It relates to the communicability of language and means exposing the word in its mediality, without transcendence, as he says. “Politics is the exhibition of a mediality: it is the act of making a means visible as such.” (2000:116). Could we think of this kind of politics in relation to *The Hunger Games* as a film medium?

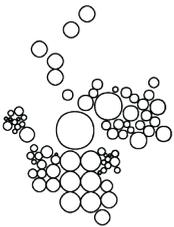
One way to think how mediality might be at play in *The Hunger Games* is the way in which the medium of a reality show is rendered visible in its particular narrative and visual strategies, such as a romantic love scenario or a compete-to-success and celebrity story, in which young adults participating in these shows are most commonly being framed. The novels, which have been marketed as young adult fiction, depict the reality and celebrity TV procedures that are sound-vision media formats and thus particularly well suited for a visual (re)representation in the film medium. The films, through framing and editing the scenes in certain ways, try to play with positioning the audiences of the films themselves in the same shoes as the Panem audiences of the Games in the narrative, whose viewing manages class and age differences and killable lives. Similarly, the film screen visualizes how the screens throughout Panem smoothly switch back and forth between the spectacle and surveillance modes, unleashing the nation-state power to kill. In this way, the films are trying to make visible and critique the exploitative, murderous and military haunting of the western capitalist entertainment TV screens, or to recall Suzanne Collins’s remark, such moments in which reality TV and footage of the invasion of Iraq begin to unsettlingly blur. At the same time while playing around and critiquing the medium of reality TV and its functioning within the global capitalist biopolitical economy, *The Hunger Games* films themselves are surely part of the capitalist production of the spectacle (if we choose to stay with this notion). They are embedded within the western corporate structures of film industry production, distribution and consumption, and with their stylish high-production appearance and big box office numbers, also seem to quite successfully manage the visual-auditory attention in a rather spectacular way.

## REFERENCES

- Agamben, Giorgio. 2000. *Means Without End: Notes on Politics*. Minneapolis: University of Minnesota Press.
- Agamben, Giorgio. 1998. *Homo Sacer: Sovereign Power and Bare Life*. Stanford University Press.
- Campbell, Timothy. 2011. *Improper Life: Technology and Biopolitics from Heidegger to Agamben*. Minneapolis: University of Minnesota Press.
- Crary, Jonathan. 1989. "Spectacle, Attention, Counter-Memory". *October* 50. The MIT Press.
- Foucault, Michel. 1995. *Discipline and Punish: The Birth of the Prison*. Vintage Books.
- Foucault, Michel. 2003. *Society Must Be Defended, Lectures at the College de France*. Picador.
- Grant, J. "The Roman Gladiator", *Encyclopaedia Romana*.  
[http://penelope.uchicago.edu/~grout/encyclopaedia\\_romana/gladiators/gladiators.html](http://penelope.uchicago.edu/~grout/encyclopaedia_romana/gladiators/gladiators.html)
- The Hunger Games*. Wikipedia entry: [http://en.wikipedia.org/wiki/Hunger\\_games](http://en.wikipedia.org/wiki/Hunger_games)
- The Hunger Games*. 2012. film, director Gary Ross.
- The Hunger Games: Catching Fire*. 2013. film, director Francis Lawrence.



# BOOK REVIEWS



**EDUARDO KOHN, *HOW FORESTS THINK: TOWARD AN ANTHROPOLOGY BEYOND THE HUMAN*. UC PRESS, 2013**

Gretchen Meddaugh

An Assistant Professor of Anthropology at McGill University, Kohn explores the sense in which non-human life forms think and how this construal of the term *thinking*, which certainly does not presuppose that thinking takes place only in a brain nor that it takes place only at a conscious level, is constitutive of all life. An appeal to anthropologists to question fundamental assumptions concerning the scope of anthropology, being a study of the human, the book also contributes to a re-examination of the definition of *life* in the social sciences and which aspects of life can be studied empirically.

To understand human life more completely, according to Kohn, anthropology must look at the context surrounding and connected to human life. Aspects of the human environment and experience other than human life per se, such as animal lives or human death, are not merely legitimate but essential topics for a more developed anthropology capable of giving a more accurate picture of the human. Exploring the context of human life--and how it relates to what is external yet integral to it--necessarily involves examination of human thinking, concepts, and language, Kohn believes. An expanded and improved approach to anthropology will consider how nonhumans see, represent, or perhaps think about humans. A major concern of the book is with semiotics, signs and meaning, and which entities can be said to think. Convincing his readers that not only humans think is an important part of Kohn's project, and early in the book he defines sign processes as encompassing more than just symbolic, human thought. If one unique, defining aspect of human life, namely meaning and representation, turns out not to be exclusive to humans, then anthropologists must alter the scope of their study and we humans must refine our understanding of ourselves.

Kohn does not use the phrase *ontological pluralism*, nor does he refer to its major proponents, so it is not clear (to this reviewer) how closely he agrees with that approach. Although John Searle's work is not referred to in *How Forests Think*, there are strong parallels regarding the scientificity of ontological subjectivity. There is only passing mention of Thomas Nagel, though some of Kohn's assumptions seem sympathetic to Nagel's philosophical rationalism. Without explicitly stating any opinion on materialism, Kohn certainly does criticize Cartesian dualism. With this book he hopes to reshape anthropology's approach without the field aligning with either a mechanistic or an exclusively human-meaning-dependent view. He does see dualism as inherent in human thinking, contrasting our mode with the sense in which

a forest, as a network of interdependent beings, can be said to think: that is, holistically.

Throughout the book there are frequent references to Charles Peirce, especially early on in the explanation of the importance of semiotics to this vision of a new anthropology. Given Kohn's insistence that his approach is empirical, his emphasis on the work of Peirce, which is over a hundred years old now, and absence of empirical data from sciences such as biology or neurology, give an anemic cast to his hypotheses. It makes sense to include the context of human existence as a legitimate aspect of anthropology, though what Kohn concludes from this will be difficult for most readers to accept. He may not encounter resistance insisting that the way in which forest-dwelling animals see humans is worth examining when studying a subset of humanity living in the Amazon forests, and his study of such a group provides all of the examples in *How Forests Think*. It is a much bigger conceptual hurdle, however, to even understand how a forest ecosystem, taken as a whole, might be said to think, much less to agree that it does. Kohn has a precise and technical definition of the word *think*, which does not mean that animals, much less an ecosystem, can do what we mean by the everyday sense of *think*, which would be a far more impressive claim. Other claims that many readers will find problematic include the reality and existence of souls, spirit masters and forms. Again, even though Kohn has a specific definition of what constitutes reality and delineates carefully what he means by *form*, utilizing words with so many broader and powerful connotations does not make it easier to follow or agree with his arguments.

Kohn makes no claim that his book should be considered a work, primarily, of philosophy, but his aspirations for anthropology concern the fundamental philosophical approach of the discipline. Some of his views and arguments parallel issues in philosophy of mind and of language, and his work could benefit greatly from examining how similar issues have already been debated extensively by philosophers. It would be enlightening to read more on Kohn's response to Nagel's *What Is It like to Be a Bat* and his reference to the thought experiment seems inexplicably brief, considering how closely Nagel's ideas and Kohn's argument pertain to one another.

An improved anthropology will concern itself with how humans—uniquely—relate to nonhuman beings. In the introduction to his book, Kohn sets out his framework, and the abstract nature of his investigation is demanding conceptual work. There he previews the conclusions he hopes readers will eventually make, and in doing so he will inadvertently deter less open-minded readers. *How Forests Think* is sure to be challenging for anthropologists as much as it is for readers from other fields also concerned with the study of being human. A deeper, richer understanding of human lives will emerge from the intersection of Kohn's new anthropology with experts including philosophers of language, philosophers of mind, cognitive scientists, and primatologists. The book will also be of interest to philosophers of the social sciences and those concerned with ontology. The fundamental integration of thinking with

life--as presented in *How Forests Think*--will surely appeal to and stimulate readers interested in the Gaia Hypothesis, Searle's biological naturalism, or biosemiotics, and anyone else who ponders the characteristics of the world humans inhabit and what, essentially, it is to be human.

***CARY WOLFE, BEFORE THE LAW. HUMANS AND OTHER ANIMALS IN A BIOPOLITICAL FRAME***  
**THE UNIVERSITY OF CHICAGO PRESS: CHICAGO AND LONDON, 2013.**

Fani Cettl

Cary Wolfe's most recent book focuses on how to think about the so called "animal question" within the framework of biopolitical thought. By "the animal question" he refers to the recently renewed critical interest in the ontological and ethical status of nonhuman animals in western philosophies, science and politics. Recent research in the fields such as cognitive ethology, coupled with the questioning of Enlightenment humanist values, has propelled new ways of thinking about animals beyond preserving a privileged status for an entity called human, which for Wolfe opens questions about how nonhuman animals are treated in practices such as factory farming. Building on his previous work, in this volume Wolfe turns to exploring the usefulness of biopolitical theories to think about such questions.

He starts from a perceived blind spot in the biopolitical thinkers, who have been concerned with unpacking how modern western modes of governing try to capture something called "life", to address explicitly how the lives of nonhuman animals figure in this, and thus implicitly keeping the link between the politicization of life and particularly human life. Wolfe's genealogy of biopolitical thought is extensive and spans from the precursors Hannah Arendt and Martin Heidegger, through its classical articulation by Michel Foucault, up to the contemporary figures of Giorgio Agamben, Roberto Esposito and Judith Butler. In order to focus on the lives of nonhuman animals, Wolfe brings to the biopolitical discussion two approaches that he explored in his previous work—Jacques Derrida's deconstruction and Niklas Luhmann's systems theory. In Wolfe's view, this offers a way towards thinking highly differentiated notions of the human and nonhuman life and moving beyond an impasse between either a strictly affirmative (simply embracing all life forms) or completely thanatological (seen only through a possibility to be killed) view of life.

Wolfe's style in this brief, 100-page volume, is lucid but quite theoretically dense, so knowing a little about his arguments from the previous works certainly helps the reader navigate. Let me just very briefly refer to a genealogy of Wolfe's thought. In *Critical Environment*s(1998) he is interested in how to think about the situatedness of all knowledge claims that theory posits and at the same time pay attention to the material political implications of such theory. In Wolfe's view, systems theories by Humberto Maturana and Francisco Varela in biology and that of Niklas Luhmann

in social sciences do a good job of tackling their own contingencies of knowledge. In *Animal Rites* (2003), these epistemological inquiries become connected to critiquing the philosophical and political discourses of what Wolfe calls “speciesism”, or the ways in which “human” is seen as exceptional to and more valued than all other animals. Though sympathetic to the philosophies of animal rights, Wolfe sees them as not questioning the Enlightenment traditions of rational and autonomous subject enough, but rather trying to extend some of these subjectivity traits to certain animals, such as great apes. He proposes that Derrida’s critique of the human-animal philosophical distinctions can help unsettle the notion of the human subject. The two theoretical threads—systems theory and deconstruction—converge in a more elaborate way in Wolfe’s next work *What is Posthumanism* (2010) where they are discussed as possible “posthumanist” approaches. By this Wolfe refers to their displacement of any kind of human exceptionalism in a material environment shared with nonhuman entities, and to Derrida’s explicit questions about the violent practices towards nonhuman animals. Finally, posthumanism and animal ethics, with the names of Luhmann and Derrida, are put in dialogue with the biopolitical theories in *Before the Law* (2013) to discuss how the lives of nonhuman animals are captured through the discourses and practices of contemporary global capitalism.

Let me flag some of Wolfe’s ideas at the intersection of animal ethics and biopolitics that I find most interesting. First of all, he argues that biopolitical theories can address the contemporary material and political positionings between human and animal bodies in more sophisticated ways than the discourse of animal rights, which explicitly wants to rethink these relations. Though he supports projects such as granting basic rights to great apes based on the human rights model by the Spanish Parliament in 2008, Wolfe proposes that biopolitics helps to understand how the Spanish great ape project and the huge pet industry in the USA can co-exist simultaneously with the American and global factory farming industries. Agamben’s distinction between *bios* and *zōē*, between politically valued and politically expendable life, which for Agamben correlates with the distinctions between the notions of human and animal within the human, is redeployed by Wolfe to consider various differentiations made within the notion of animal itself—such as pets and animals for slaughter. So the key point for Wolfe is not to simply look at how something called “animal” is politically exposed, but rather to look at how heterogeneous forms of life across the species lines are being framed within the contemporary flows of capitalist economies.

To think about how living bodies are framed “before the law”, as the title says—by which Wolfe means two things: how they are included/excluded in front of the law, and what is posited as being “prior” to an incision of law into materiality—Wolfe considers a Foucauldian approach and his notion of *dispositif* particularly useful. *Dispositifs* are relations of bodies, forces and technologies through which biopower operates on life. Wolfe prefers this approach to Agamben’s relation between sovereignty and life, which he considers too symmetrical, suggesting that

the notion of sovereignty might not be able to approach highly differentiated biopolitical operations. Also, Agamben's notion of sovereignty captures life primarily through a possibility to be killed—in a thanatological way. In contrast to this, Wolfe draws on Foucault's notion of biopower as not strictly thanatological, but rather “productive”—which means that it works both as thanatological, by fragmenting the biological field through racism, to which Wolfe adds speciesism, *and* affirmative, in the sense of certain forces of resistance to dispositifs, such as a strategic deployment of animal rights discourse. Wolfe proposes to look at biopower as diverse, contingent, strategic arrangements of bodies that frame the living rather than primarily capture it thanatologically through sovereignty.

If Wolfe is critical of Agamben's entirely thanatological view of biopolitics, he is also critical of a completely affirmative one, which he reads in Roberto Esposito's affirmation of “life” as that which should be indiscriminately preserved. Wolfe asks if an undifferentiated notion of life is supposed to collapse all differences between forms of life, say human life and that of bacteria. In contrast, he argues that both life and norm should be thought of at the same time, and he thinks that Esposito's notion of “immunity” is useful for this, as well as ideas from systems theory and deconstruction. The notion of immunity that Esposito discusses, and which Derrida in his own way also deploys, Wolfe superimposes with the notion of “autopoiesis” from the systems theories of Maturana and Varela, and Luhmann. Autopoiesis is an organization of a living system that is coupled to its environment, the structural components of which change through the process of evolution. This is how biological organisms develop complex social behaviours, and Wolfe's many examples of the recent scientific research into animal cognition and behaviour support his philosophical, Derridean critique of the privilege of human language and consciousness. Wolfe's intervention with the notion of autopoiesis into the biopolitical theories is aimed to consider an “immunitary logic of life”—as a closed, embodied system on the level of organization, but open to its environment on the level of structure. In Derrida's vocabulary, this is discussed as a contingent, performative character of any law, which is also open and changeable in relation to whatever comes as “other”. Wolfe sees this logic of immunity as more productive to discuss biopolitics than sovereignty, as sovereignty makes expendable that which it excludes as a supposed outside to its contingent law, which immunity does not necessarily do. This is important for Wolfe because it keeps open the question of who/what is granted immunitary protection in various contexts, and keeping the “animal question” open is Wolfe's aim for animal ethics. His arguments are complex yet innovative, and will be interesting for anyone interested in the intersection of animal ethics and biopolitics.

## REFERENCES

Wolfe, Cary. 1998. *Critical Environments*. 1st ed. Minneapolis: University of Minnesota Press.

Wolfe, Cary. 2003. *Animal Rites*. 1st ed. Chicago: University of Chicago Press.

Wolfe, Cary. 2010. *What Is Posthumanism?*. 1<sup>st</sup> ed. Minneapolis: University of Minnesota Press.

Wolfe, Cary. 2013. *Before The Law*. 1st ed. Chicago: The University of Chicago Press.

**CARRIE FRIESE, *CLONING WILD LIFE. ZOOS, CAPTIVITY, AND THE FUTURE OF ENDANGERED ANIMALS*. NEW YORK AND LONDON: NYU PRESS, 2013**

Marianna Szczygielska

**I**n February 2014 the decision of the Copenhagen Zoo's authorities to put one of its giraffes to death caused outrage worldwide. What proved to be particularly shocking for wider public was the reason behind killing a young, perfectly healthy zoo animal: Marius (an informal name given to the giraffe by the zoo keepers) was considered *genetically unsuitable* for further breeding. Despite desperate efforts to save him (including several adoption offers from other institutions), Marius was put down with a shot in the head, and then publically dissected in front of an audience—a practice believed to be fulfilling the zoo's educational mission. In an official statement, the Zoo's Scientific Director, Bengt Holst, explained that the institution is part of the international breeding program that manages a healthy captive population of giraffes in Europe: "As this giraffe's genes are well represented in the breeding programme and as there is no place for the giraffe in the Zoo's giraffe herd the European Breeding Programme for Giraffes has agreed that Copenhagen Zoo euthanize the giraffe."<sup>1</sup> In the midst of the heated debates on controversial zoo practices in nature conservation, Carrie Friese's book *Cloning Wild Life: Zoos, Captivity, and the Future of Endangered Animals* not only sheds more light on this gruesome side of wildlife management, but more importantly provides a wider context to understand the zoo scientists' strong investment in the genetic "animal capital" (Shukin 1995).

It might come as a surprise that in order to research most recent developments in global biotechnology, and more specifically the scientific practice of interspecies nuclear transfer (cloning), Friese has chosen to look at the institution of the zoological garden. Why not focus on bioengineering in highly capitalized areas like medicine or agriculture? The author rather draws crucial links between these fields by showing how micro-level practices travel between them, for example: how kinship charts and studbooks move from livestock to wildlife management, and how medical companies apply their know-how to endangered species cloning. Moreover, when it comes to matters of reproduction of species, along with the ideas of nature, national identity, capital, family, colonialism and other social orders, zoos share a long and troubling history of these bio- and necro-political practices. As I argue elsewhere, "zoo nonhuman animals have been bred in captivity for generations, their genetic material is an object of international trade, and most recently they have become subjects of genetic engineering – all of this makes them fall into the definition of transbiological

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<sup>1</sup> Why Does Copenhagen Zoo Euthanize a Giraffe?," *Copenhagen Zoo*, 02 2014

organisms that are ‘made to be born’” (Szczygielska 2013, 101). Combining sociological methodology with science and technology studies, Friese’s study delves into socio-biological fabric interweaving in these biotechnological practices, and carefully uncovers the multileveled controversies and tensions within the zoo world and nature conservation that usually remain reserved for experts and insiders.

The overarching argument of *Cloning Wild Life* is that through the practices of cloning endangered species, the lives of human and nonhuman animals become deeply entangled or even reshaped according to biopolitically inflected redefinitions of what constitutes a *species*. Throughout the book Friese aims at showing how “animal reproduction is interlinked with social forms that are central to human social life, particularly capital, class, and the state” (Friese 2013, ). She interviewed twenty-one reproductive scientists, zoo geneticists, members of and advisors to Taxonomic Advisory Group and Species Survival Plans, and field conservationists. This perfect example of capturing “science in action” (Latour 1987) is a valuable source material for anyone doing research on the contemporary zoological gardens. The author situates the turn towards reproductive biotechnology in zoological wildlife management in a historical context, collapsing such events as the birth of Louise Brown (the first human born from in vitro fertilization), the ratification of the Endangered Species Act, and the Convention on International Trade of Endangered Species of Wild Fauna and Flora in late 1970s (Friese 2013, 60-61). However, she only briefly acknowledges the simultaneous processes of decolonization, which directly influenced the drafting of mentioned international trade documents and therefore necessitated securing different sources of specimens for zoological exhibitions in the global North and consequently the development of better breeding techniques in captivity.

In subsequent chapters the author follows three scientific projects on cloning banteng, the African wildcat, gaur and sand cat in the U.S., and the amphibian-cloning project in the U.K. She traces the transfer of particular techniques in fields such as agriculture, nature conservation, biomedicine, and human-assisted reproduction technologies. Her argument is built on the conceptual framework of “transposition,” which she developed with Adele Clark as a tool “useful for analytically highlighting the work involved in moving knowledge, techniques and bodies to different places and contexts, thereby creating dynamic relations among different things, species, organizations and spaces” (Friese and Clarke 2012, 4). Friese eloquently guides her readers through the alleys of San Diego and London zoos, various research facilities, biotech laboratories, scientific conference rooms and corporate corridors of the Frozen Zoo™ to expose the complexities of techno-scientific practices of cloning endangered species. She also convincingly demonstrates the ambiguous status of cloned endangered animals, which are technically hybrids between wild species and domestic surrogates used for cell nuclear transfer. They embody a “genetic value” for humans only under certain conditions. She raises important questions about the classificatory status of cloned animals, and sketches out a hierarchical taxonomy,

where mitochondrial DNA from a domestic egg donor might disqualify a clone as an endangered species. She argues that “purifying the genetic basis of endangered species is highly significant in this particular situation, and is in turn heavily patrolled” (Friese 2013, 116).

I find it crucial that in exposing the intensive traffic in animal bodies, bodily parts, knowledge, technologies, and infrastructures, Friese pays careful attention to what Jasbir K. Puar and Julie Livingston call “moments of taxonomic tension” (Livingston and Puar 2011) between ascribed categories of “domestic” and “wild”, “plentiful” and “endangered”, “sacrifice-able” and “protected.” Most importantly this form of technologically mediated asexual reproduction still requires redistribution of reproductive labour onto domestic animals whose bodies, or their parts, are “contracted out,” becoming the very infrastructure of cloning technology itself. Although Friese promises to focus on the human-animal interface of these practices, I feel her analysis is disengaged with far-reaching interspecies parallels between humans and animals in outsourcing reproductive labour. If, as she suggests, the underlying reason for cloning endangered species is to practically and ethically validate interspecies nuclear transfer for wider commercial use, then the free flow of reproductive techniques between biomedicine and animal transbiology carries similar classificatory ideas, which, fueled by global economic inequalities, deem some human bodies “sacrifice-able,” “plentiful” and “more affordable” for reproductive labour. In this way the division of reproductive labour is prone to be “transposed” back and forth between human and nonhuman actors and to generate classificatory tensions that easily translate into biopolitical categories of power like “species,” “race,” and “class.” All of these categories have been, and continue to be, a crucial part of the zoological spectacle of exhibiting nature.

Given the zoos’ investment in maximizing genetic diversity of captive populations and its devotion to the spectacular side of animal display, one might expect cloned animals to be highly visible within the zoological exhibition. On the contrary, Friese describes how she experienced some difficulties in identifying a cloned banteng in San Diego Zoo, because its “non-natural” origin has been consciously downplayed. Her argument is that the primary goal of endangered species cloning projects is not to create a spectacle, but rather to prove that interspecies nuclear transfer works. In this way she counters Sarah Franklin’s take on transbiology as something more than “proof of principle,” not just a mere demonstration of technology (Franklin 2007). More importantly, Friese argues that the special status of endangered animals ensures public support for stem cell research and therapeutic cloning in general, by directing public attention away from apocalyptic scenarios of human cloning, towards promissory futures of saving rare species from extinction. She points out that “media spectacles regarding technoscientific making of zoo animals is meant to bring in funding for the zoo, generating a new source of capital for zoological parks to pursue their scientific identity” (Friese 2013, 66). Friese then contrasts this “spectacular science” approach with what she calls “basic science.” Whereas the first one invests

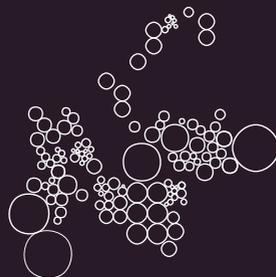
in cloning exotic, furry and marketable mammals like the giant pandas, the latter applies interspecies nuclear transfer to less spectacular animals like frogs in order to create model systems for better understanding basic biological processes. Even though throughout her discussion of novel biotechnologies Friese is careful about falling into neither technophobia nor technophilia, she seems to privilege the basic science approach.

To sum up, Friese's book convincingly shows how the contemporary zoo no longer serves as a simple collection, a menagerie of species frozen in their taxonomic moments, but rather becomes a space of intense chronopolitics materialized in Species Survival Plans (SSPs) or the Frozen Zoo™ designed to alleviate the trauma of extinction and, with the tools of modern technoscience, to secure "a better future." Her intricate analysis of technoscientific modes of reproduction prompts the following questions: What kinds of futures are imagined with biodiversity as an ultimate goal of zoological gardens' mission? What kinds of longing and grief are involved in human desire to rescue certain species from extinction? Can we grieve the death of Marius, the giraffe from the Copenhagen Zoo, in the same way we would grieve the last extinct sandcat or banteng? In her analysis of "grievable life" Judith Butler urges readers "... to reconceive life itself as a set of largely unwilling interdependencies, even systemic relations, which imply that the 'ontology' of the human is not separable from the 'ontology' of the animal" (Butler 2009, 76-77). By witnessing cloning experiments in action and recognizing cloned animals as important witnesses to the myriad of social and biological relations that enabled their own existence, Friese skilfully unwinds the human-animal ontological choreography of these scientific practices. *Cloning Wild Life* delivers an novel perspective on zoological parks, reproductive technologies, and the remaking of nature, especially valuable for anyone interested in Science and Technology Studies, posthumanism, nature conservation, social studies of reproduction, and animal studies.

## REFERENCES:

- Butler, Judith. *Frames of War: When Is Life Grievable?* New York: Verso., 2009.
- Franklin, Sarah. *Dolly Mixtures: The Remaking of Genealogy*. Durham: Duke University Press, 2007.
- Friese, Carrie. *Cloning Wild Life: Zoos, Captivity, and the Future of Endangered Animals*. New York: NYU Press, 2013.
- Friese, Carrie, and Adele E. Clarke. "Transposing Bodies of Knowledge and Technique: Animal Models at Work in Reproductive Sciences." *Social Studies of Science* 42, no. 1 (February 1, 2012): 31–52.
- Latour, Bruno. *Science in Action: How to Follow Scientists and Engineers Through Society*. Open University Press, 1987.
- Livingston, Julie, and Jasbir K. Puar. "Interspecies." *Social Text* 29, no. 1 106 (March 20, 2011): 3–14. doi:10.1215/01642472-1210237.

- Ritvo, Harriet. *Possessing Mother Nature: Genetic Capital in Eighteenth-Century Britain*. Man and Nature, 1995.
- Shukin, Nicole. *Animal Capital: Rendering Life in Biopolitical Times*. Minneapolis: University of Minnesota Press, 2009.
- Szczygielska, Marianna. "Transbiological Re-Imaginings of the Modern Self and the Nonhuman: Zoo Animals as Transbiological Entities." *Identities* 10, no. 1–2 (Summer/Winter 2013): 101–10.
- "Why Does Copenhagen Zoo Euthanize a Giraffe?" *Copenhagen Zoo*, 02 2014.  
<http://www.zoo.dk/BesogZoo/Nyhedsarkiv/2014/Februar/Why%20Copenhagen%20Zoo%20euthanized%20a%20giraffe.aspx>.



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