Beyond Disability: Extraordinary Bodies in the Work of William Gibson

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1. Introduction: From Prostheses to Processes

This book aims to conceptualize figurations of disability in the work of contemporary U.S.-American writer William Gibson. By adopting a disability studies framework, I argue that Gibson's narratives contain yet untapped potential to re-think non-normative bodies and minds thereby offering a new perspective on the author who is known for coining "cyberspace." Over the course of twelve novels, and more than twenty short stories,[1] Gibson's specific literary style and concrete thematic interests have varied. Yet, from his short story collection *Burning Chrome* (1986) to his latest and first graphic novel *Archangel* (2017), Gibson's oeuvre has always been concerned with the question of the materiality and embeddedness of an embodied human being. This is not to deny the author's explorations of new, imaginary, or re-issued technologies, and particularly the unanticipated possibilities of their "misusage" as manifested in his famous claim that, "the street finds its own uses for things" ("Burning Chrome" 215). The specification of "things" in this iconic sentence indicates "the stuff [that is clinically used] to counter senile amnesia" and usually eludes attention by scholars ("Burning Chrome" 215). This widely unrecognized reference to a failing physiological functionality of the body and its medical treatment lends particular import to the purpose of this thesis, which is to re-read Gibson as a writer of the extraordinary body.

In Gibson's pioneering cyberpunk fiction, readers experience everything from simulated sensory perception technologies in "Fragments of a Hologram Rose" (1977), reflective mirrorshades in "Johnny Mnemonic" (1981), a whirring myoelectric arm prostheses in "Burning Chrome" (1982), and a corrosive exoskeleton in "The Winter Market" (1985) to the more traditional science fiction tropes of time travel, parallel universes, human cloning, and military quantum transfer technologies (*The Peripheral*, *Archangel*). Notably, all of the radical, futuristic technologies of Gibson's fiction decisively relate to the human body. By presenting figures that are damaged, deformed, and dysfunctional as well as sutured, restored, prosthetisized and technologically enhanced, Gibson interrogates the body's abilities, challenges its appearances, and confronts readers' preconceptions of the normal body. In this sense Gibson is a naturalist rather than a futurist, an anthropologist of the present rather than an archeologist of the future. The overt corporeal exceptionalities of Gibson's characters elude normative classifications. Instead of ossifying the characters' relations as "special" at best, "deviant" at worst, Gibson opens up innovative ways to conceptualize extraordinary bodies.

While all three trilogies equally draw attention to the extraordinary body, they do so in different ways. There is a distinct development in the representation of the manner and effect of corporeal extension from the Sprawl to the Bigend trilogy. In the Sprawl trilogy, prosthetic repair and rehabilitation are depicted as a common cultural practice, whereas in the Bigend trilogy the medical cure of the characters' "deficiencies" for purposes of normative alignment is no longer a desired measure. I argue that this transition is not primarily related to a shift in genre, which does exist and will be classified as from technoromanticism to new realism, but instead that it is

[1] Apart from the collected stories of *Burning Chrome* there are several uncollected (all commissioned) stories, among others "Tokyo Collage" (1988), "Tokyo Suite" (1988), "Hippy Hat Brain Parasite" (1983), "The Nazi Lawn Dwarf Murders" (unpublished), "Doing Television" (1990), slightly expanded and republished as "Darwin," "Skinner's Room" (1990), "Academy Leader" (1991), "Cyber-Claus" (1991), "Where the Holograms Go" (1993), "Thirteen Views of a Cardboard City" (1996), "Dougal Discarnate" (2010).

motivated by a changing attitude toward the "broken" body that seeks restoration. The socio-historical negotiation of bodies suffering from individual incapacities or social disadvantages is located in the field of disability studies. My analysis goes hand in hand with the denaturalization of disability as a stable category of inherent individual deficits, and draws on Rosemarie Garland-Thomson's terminology regarding the "extraordinary" body, which she refers to as a "paradigm of what culture calls deviant" (*Extraordinary Bodies* 6).

A main concern of this book is to understand the formal qualities of Gibson's writing with regard to the forms and functions of the disabled figure, and to further demonstrate how this literary style and underlying ideology changes in parallel with the advancement of cultural conceptions of disability. I distinguish two major shifts over the course of the novels, one on the level of genre and the other on the conceptual level. I show how Gibson's depiction of characters draws increasingly on a processual understanding of the human body, and decreasingly on traditional prosthetic technologies. This conceptual trajectory from prostheses to processes corresponds with the genre-specific shift in Gibson's work that I classify as one from technoromanticism to new realism.

Overall, I approach Gibson's oeuvre chronologically. I will begin in this introduction with his cyberpunk short stories and conclude with his latest works, *The Peripheral* (2014) and *Archangel* (2017). The main focus of my analysis lies on Gibson's three trilogies, which inform the structure of chapter 4. Chapter 4.1 centers on the Sprawl trilogy: *Neuromancer* (1984), *Count Zero* (1986), and *Mona Lisa Overdrive* (1988). Then, chapter 4.2 focuses on the Bridge trilogy: *Virtual Light* (1993), *Idoru* (1996), and *All Tomorrow's Parties* (1999). Finally, chapter 4.3 examines the Bigend trilogy: *Pattern Recognition* (2003), *Spook Country* (2007), and *Zero History* (2010). Within each of these chapters however I will not proceed strictly chronologically, but will discuss the construction of disability thematically across each set of novels with a focus on characterization techniques and representational strategies.

Since a study of the construction of disability in Gibson's novels demands an introduction into, and explication of, the ways in which "the human body" was culturally understood, categorized, and conceptualized in the time of Gibson's writing, my analysis of the conceptual shift from prostheses to processes is methodologically met with a theoretical triad that feeds on the socio-historical developments of the concept of disability. To that end, chapter 2.1 begins with the historicizing of material bodies in medical history. Until the intervention of disability activism and disability studies in the 1960s and 1970s, a medical model dominated cultural understanding of disability. Developed in the 1970s, the social model provided an entirely new, constructivist notion of disability. Chapter 2.2 draws on criticism of the semiotic body as proposed by the social model of disability and supplements it with an intersectional approach. In chapter 2.3, I present an actor-network theory approach to disability that is grounded in contemporary science and technology studies, and further allows a discussion of both semiotic and material entities, particularly in the sense of their interrelation.

This book can be read in two ways. Read in its own chronology chapter 2 presents the conceptual shift from prostheses to processes in the historical theorization of disability. This development is mirrored in Gibson's trilogies, which correspond to the three decades that have been significant for the reconceptualization of disability. The literary shift from prostheses to processes in Gibson's fiction is discussed in chapter 4. Readers who are more profoundly interested in the detailed resonances

between disability history and the corresponding analysis of Gibson's trilogies are invited to read the chapters 2.1 and 4.1, 2.2 and 4.2 as well as 2.3 and 4.3 consecutively.

In its totality, this book is indebted to Nickianne Moody's "disability-informed criticism". Inspired by Cheryll Glotfelty and Harold Fromm's (1996) model of an ecologically informed criticism, Moody advocates a methodology for studying disability in literature that aims at understanding "both the cultural product and the culture that produced it" (30). In opposition to those traditions of literary criticism that analyze a subject matter (disability or other) either on the basis of the biography of the author alone or as an issue relevant only within the fiction of the story, Moody's

> methodology requires the researcher to focus on the fictional disabled subject, their interrelations within the narrative and the context of disability in the fictional world. From this vantage point the structure of the text, its cultural significance, and the meaning of disability to the culture in which the narrative is produced and consumed, are the pivotal interests of the analysis (31).

Therefore, disability-informed criticism urges the literary analysis of literary disability to link back to a culture's socio-political realities, for instance, the medical-industrial complex[2], ablenationalism[3], austerity[4], and eugenic world building throughout various historical moments[5]. Moody continues,

> Such an approach has to draw on literature from the broader humanities and disability studies. It is concerned with the role, appearance, discursive treatment and resonant meaning of the characters in the narrative; and their dealings with, or the absence of, representations of a disabling environment; and power relations between able-bodied and disabled interests (31).

As shown above, in its literary analysis this study draws on a theoretical triad of the medical, social, and actor-network theory approaches toward the disabled body and disabled literary figure.

Burning Chrome provides a point of departure for this book. In this introduction, I illustrate how Gibson's early short stories prefigure the language and style, tropes and characters, as well as underlying ideologies, of his novels. In these short stories, these elements already exist in embryonic form. Therefore, the analysis of a selection of stories does not only achieve the purpose of familiarizing the reader with Gibson's fiction, but conceptually prepares the ensuing analyses of his trilogies. To this end, the prominent examples of "Johnny Mnemonic", "Burning Chrome," and "The Winter Market" are discussed as they explicitly showcase the prosthetically enhanced body. Stories from the collection that do not put the extraordinary body center stage nonetheless inconspicuously remark on it. For example, "New Rose Hotel" touches upon the ideological belief in corporeal wholeness, the medical practices of reconstruction, and the social practice of "passing" when a character

[2] See Jasbir K. Puar's discussion in "Coda: The Cost of Getting Better" (2012).
[3] See David Mitchell and Sharon Snyder's *The Biopolitics of Disability: Neoliberalism, Ablenationalism, and Peripheral Embodiment* (2015).
[4] See Dan Goodley, Rebecca Lawthom and Katherine Runswick-Cole "Dis/ability and Austerity: Beyond Work and Slow Death" (2014).
[5] See Garland-Thomson's "Building a World with Disability in It" (2016).

mentions that "his left shoulder skewed at an angle no Paris tailor could conceal," that "[s]omeone had run him over with a taxi in Berne, and nobody quite knew how to put him together again" (125). These subtle references to extraordinary corporeality pervade Gibson's work, making the extraordinary body a staple ingredient to his literary repertoire. At the same time, the short stories serve as a foil to throw the conceptual and genre shifts of his work into relief.

Moreover, this introduction contextualizes Gibson as a science fiction author, and provides an overview of his work's reception in order to highlight the neglect of disability therein. Although, for instance, the notions of the posthuman and transhuman have attracted some attention over the years, the concept of disability remains a blind spot in Gibson scholarship. In this introduction I will, therefore, first explain the role of the normal and disabled figure in science fiction, cyberpunk, and post-cyberpunk literature before turning specifically to Gibson's work. Chapter 3 in particular, discusses the attention, or the lack thereof, that has been given to Gibson's depiction of the extraordinary body in the academic reception of his trilogies.

THE DISABLED FIGURE IN SCIENCE FICTION

For a long time, medical conceptualizations dominated literary depictions of the disabled human body. From folktales and classical myths to modern and postmodern fictions, the disabled body has been traditionally figured as a symbol of mental deficiency or moral corruption, as a consequence of Godly punishment or personal tragedy, as an occasion of freakish spectacle or grotesque manifestation, and as a condition to be overcome or rehabilitated in order to return to order, health, and normalcy. As a genre with arguably infinite possibilities in its creation of worlds, societies, and creatures, traditional science fiction resorts to surprisingly normative notions in the construction of all three.

The heroes of classic science fiction stories by Jules Verne (1828-1905), H. G. Wells (1866-1946), Hugo Gernsback (1884-1967), Robert A. Heinlein (1917-1977), Arthur Clarke (1917-2008), Isaac Asimov (1920-1992), Ray Bradbury (1920-2012), and Harlan Ellison (1934), as well as those in contemporary work such as that of Andy Weir and Neil Gaiman, are often rational scientists and undaunted warriors of mostly good health and good morals. Sometimes they are on a mission to explore and missionize or colonize outer space, or they may be tasked with defending the world from alien forces and re-establishing law and order. What most of them have in common is a specific body type we re-encounter in film and television adaptations. Examples of this include: George Reeves in *Adventures of Superman* (1952-1958), Walter Pidgeon and Leslie Nielsen in *Forbidden Planet* (1956), Lee Majors in *The Six Million Dollar Man* (1973-78), Harrison Ford in *Star Wars* (1977), Sam J. Jones in *Flash Gordon* (1980), Michael J. Fox and Christopher LLoyed in *Back to the Future* (1985), Arnold Schwazenegger in *Total Recall* (1990), Tom Hanks, Kevin Bacon, and Ed Harris in *Apollo 13* (1995), Tom Cruise in *Minority Report* (2002), *War of The Worlds* (2005), and *Oblivion* (2013), Matthew McConaughey in *Interstellar* (2014) and Matt Damon in *The Martian* (2015). With respect to representations of protagonists in Hollywood action cinema, which subsumes the majority of science fiction films, Susanne Rieser and Susanne Lummerding write that these kinds of movies cherish "the fetishistic display of male hardbodies … The martyred (and later reborn) bodies of Arnold Schwarzenegger and company testify that action film … *reaffirms* the construction of male subjectivity by renouncing its social origin" (247).

Of course, right from the early days of science fiction literary, and later filmic, works emerged that explored various forms of embodiment situated along an entire spectrum of ability. To that end, stories actively interrogated, covertly featured, or were otherwise narrated by "Others." Literary figures such as those in Mary Shelley's *Frankenstein; or, The Modern Prometheus* (1818), H. P. Lovecraft's *At the Mountains of Madness* (1936), and Anne McCaffrey's *The Ship Who Sang* (1969); or films such as the *Planet of the Apes* franchise, *The Bionic Woman* (1976-78) and *Blade Runner* (1982), further illustrate this point. However, besides the fact that any deviance from the white, male, heterosexual, able-bodied hero archetype is perceived as a "deviance" and compulsorily addressed in the narrative, the modes of representation vary significantly from that of their normal-bodied counterparts.

In terms of the depiction of disabled bodies explicitly, Kathryn Allen writes in *Disability in Science Fiction: Representations of Technology as Cure* (2013) that,

> [w]hile the settings and temporal framework of SF may differ dramatically from our own current reality, the way in which disability and people with disabilities are represented—as well as the technology that is used to contain or cure them—often directly reflects present-day biases and stereotypes (3).

As a staple ingredient in science fiction (SF), "the disabled body stood in for a whole of host of socially constructed and marginalized otherness—sexual deviance, criminality, moral and intellectual deficiency, ethnic and racial difference" (7). Following the idea that science fiction addresses the politics and ideologies of the present, Allan provides a critique on the dominant ideology of the genre, which posits technology as "a solution to overcome the physical or mental limitations of the human body" thus a "perfect body" can be attained through medical intervention (1, 11, 9). Allan argues that while all bodies undergo constant change, it is the disabled body in particular that represents "a modifiable condition that offers opportunity for … enhancement" (7). Through an emphasis on curing or rehabilitating people with disabilities, the "unruly bodies" in science fiction (and by extension, cyberpunk) are like, "no other literary genre [in coming] close to articulating the anxieties and preoccupations of the present day" (2).

THE DISABLED FIGURE IN CYBERPUNK

Gibson's unparalleled sensitivity to detail and innovative literary style guaranteed his immediate breakthrough as a young author in the early 1980s. Much to his disfavor, readers, critics, and scholars honored him as the founder of a new science fiction subgenre, deeming him "the father of cyberpunk". Gibson together with Bruce Sterling, Pat Cadigan, Lewis Shiner, John Shirley, and Rudy Rucker formed a loosely associated group of writers who addressed familiar topics in a radically new literary style. In 1983 Sterling proclaims,

> a crying need to re-think, re-tool, and adapt to the modern era. SF has one critical advantage: it is still a pop industry that is close to its audience. It is not yet wheezing in the iron lung of English departments or begging for government Medicare through art grants. … SF has always preached the inevitability of change. Physician, heal thyself" (*Cheap Truth* n.pag. qtd. in Blake).

Sterling captures not only the antagonistic and revolutionary spirit of cyberpunk writers and works, but summons the figure of the "poet-physican" in his Romantic request for the cure of an ill-adapted literary tradition to the modern era.[6] As a result, cyberpunk texts left many readers dumbfounded. As Victoria Blake holds

> [n]obody had ever read anything like what the cyberpunks were writing—stories and novels that were the bastard child of science fiction, with a common-man perspective, a love of tech and drugs, and an affinity for street culture. That most cyberpunk was written by white males didn't seems to ruffle any feathers (9-10).

Therefore, as Kelly and Kessel observe, "[i]t is not surprising that the cyberpunk movement, so quick to sneer at other kinds of science fiction and to strike an attitude of hip self-importance, would be controversial" (vii). Criticism was directed at the cyberpunks' preoccupation with surfaces instead of substances, and the recycling of classic science fiction works (vii). Kelly and Kessel go on to say, "as [the cyberpunk writers] continued to publish their innovative stories and novels, readers and—eventually—writers and critics began to acknowledge that there might be something to cyberpunk" (vii-viii). Thematically, what unites these authors is, according to David Porush, the significance attributed to the question: "What aspect of humanity makes us human?" ("Out of Our Minds" 258). As Tatiani G. Rapatzikou's discusses with regard to Gibson's fiction in *Gothic Motifs in the Fiction of William Gibson* (2004), stylistically these authors evince a strong undercurrent of Romantic and Gothic elements in settings and narrative techniques, as well as characters' attitudes towards the body and set-ups of the mind.

In contrast to traditional science fiction, cyberpunk has a distinct inclination toward figures on the margin of society, and social outcasts of all sorts. Depictions of marginalized bodies often reveal scars, tattoos, addictions, and prostheses without glorifying the outlaw. These scarred, tattooed, addicted, and prostheticized cyberpunk bodies go against the grain of the "fetish bodies of white supremacism" not by reversing the power dynamics but by complicating the characters' sense of self-identity (Rieser and Lummerding 247). It is not only the figure of the "disaffected loner from outside the cultural mainstream" that validates these writers' stories as "punk" literature (Kelly and Kessel xi). Kelly and Kessel contend that an excessive reliance on the outsider figure testifies to a disappointing lack in "extrapolative rigor" (xi). "No future could exist," they explain, "in which there were only data thieves in trench coats and megalomaniacal middle managers. Someone had to be baking the bread and driving the trucks and assembling all those flat screens. Cyberspace needs electricians!" (xi). While over the years Gibson's protagonists have evolved to more well-rounded characters and their worlds have incrementally expanded, the punk element preserves a "defiant attitude based in urban street culture," and "an adversarial relationship to consensus reality" (Cavallaro, *Cyberpunk and Cyberculture* 14, Kelly and Kessel xii).

The "cyber" element points to a particular brand of science fiction, which centers on cybernetics rather than rockets and robots. Thus, rather than outer space, cyberpunk characters explore a "paraspace," or metaphorical space under the name of cyberspace, the matrix, or virtual reality (Bukatman 200). Conceptually, these

[6] These tropes will be introduced in more detail in chapter 2.1 of this book.

alternative spaces provide more than a setting for hacker adventures, they are also virtual channels of communication and interaction, and digital networks of interrelations and control. In "Burning Chrome," Gibson describes cyberspace in distinctly visceral terms as "mankind's extended electronic nervous system" (197). The matrix, on the other hand, is understood as "an abstract representation of the relationships between data systems (196). The protagonist explains how computer cowboys have bodies "[s]omewhere … very far away" and devotes his attention to the description of the matrix as a "3-D chessboard, infinite and perfectly transparent" (200, 195). Today we might feel a certain nostalgia for the "monochrome nonspace where the only stars are dense concentrations of information, and high above it all burn corporate galaxies and the cold spiral arms of military systems," for a crude digital realm populated with "bright geometries" as the internet today is all surface (197). In Gibson's cyberpunk fiction, hackers surf through "[t]owers and fields of [corporate data, which] ranged in the colorless nonspace of the simulation matrix, the electronic consensus-hallucination that facilitates the handling and exchange of massive quantities of data" ("Burning Chrome" 197). Gibson forges a new language and new mental images that not only revolutionize traditional science fiction, but also enrich cultural vocabulary in a way that facilitates the navigation of the human in increasingly complex relationships with technology, globalization, and corporatocracy.

As Cavallaro decisively states, the body is pivotal in this negotiation of the modern era:

> in spite of several critics' claim that technology has erased the body, this is not really the case. Technology has transformed the body (at times by empowering it, at others by attenuating it) but it has not taken it away. Technological transformations of the body are crucial tools through which contemporary cultures define themselves, their beliefs and their desires. Cyberpunk enhances the body through biotechnology and futuristic surgery but simultaneously exposes it to environmental threats, corporational greed and sexual exploitation (*Cyberpunk and Cyberculture* xviii).

In this respect, Cavallaro observes the significant role of prostheses in prompting questions about the physical limits and technological extensions of the human body. He states,

> Prostheses enhance our bodies, but they also remind us of our failings, thus endowing us with a double identity: the better self and the failing self. Prostheses refine our capacities and alert us to our incapacities; they consolidate the edges of our bodies and simultaneously blur them. Indeed, by pointing to what is missing *in* and *from* the body, they question radically the body's integrity. Prostheses are there to remind us that we have always already slipped from the planes of completeness and self-sufficiency. We can never be totally sure where our edges are, where we begin and where we end. Furthermore, it should be emphasized that prosthetic devices do not simply encompass artificial limbs and implants but also the various technologies with which increasing numbers of people daily interact—from the Internet to fitness-club machinery. Is the person hooked into a computer and navigating through cyberspace, or the person developing his/her body schema through exercise equipment built with the latest technology less or more a cyborg than

> the person kept barely alive by machines in an intensive care unit, or the person connected by complex interfaces to a war craft? If all these people are cyborgs, do some retain a greater degree of humanness than others? If so, how is this humanness measured? Where does the human end and where does the technological begin? (50-1).

While Cavallaro's passage sounds like a critical disability studies scholars' introduction to a discussion of the relation between cyberpunk and disability to a disability sensitive reader in 2019, an explicit thematization of the mechanisms of the construction of disability in cyberpunk literature does not follow. This disregard of disability in Gibson's fiction exemplifies a "critical avoidance" disability studies scholars have observed across all media and genres (Bolt 287). As Ria Cheyne holds, "[t]his avoidance is typically attributed to a disabling society: the assumption is that most literary scholars, like the authors who produce and reproduce disabling imagery in their work, unconsciously reinforce wider social prejudices" (146). It is the main objective of this study of Gibson's work to address the narrative strategies, literary tropes, and underlying ideologies involved in the figurations of human embodiment in relation to disability in Gibson's cyberpunk fiction, as well as the incrementally expanding perspective on the body in his post-cyberpunk novels.

LITERARY CRITICISM AND GIBSON'S CYBERPUNK FICTION

Gibson, usually attributed with the epithet of "the author of *Neuromancer*," had his finger on the pulse of society when he wrote his novel about the essential pervasiveness of new computer technologies, apocalyptic urban landscapes, and hacker culture all of which affected the condition of the body. Opposed to science fiction literature that tended toward clean, shiny, and high-tech settings, morally and physically flawless heroes, and the faultless machines of earlier decades, Gibson initiates a turning point in the genre. His dystopian technoculture scenarios shake cultural consciousness by undermining the binary oppositions between human beings and machines. Recognizing that "[w]e cannot think realistically any longer of the human species without a machine," Bruce Mazlish associates the decades of cyberpunk with what he, in tribute to Freud, calls "the fourth discontinuity" (6). Initiated by the Copernican, the Darwinian, and the Freudian revolutions that dethroned the human from his position as master of the universe, the animal kingdom, and his own psyche, as well as the rise of modern technology spearheaded by the computer, it is clear that the boundaries between nature and artifice, the real and the virtual, the body and its mechanic extensions, have been eroded. In what way do machines relate to, or even constitute, that which they are commonly diametrically set up against? Although these questions are not at all restricted to negotiations of disability and prosthetics, it is exactly there that body and machine visibly interlock. Technological supplements, however, rather than bringing forth a new wholeness or unity, emphasize a fundamental fragmentation and diversification of embodied agency.

In light of such an abundance of provocative concerns, stylistic elements, and potential paradigm shifts, Gary Westfahl wonders at "the surprising paucity of books" devoted to Gibson (5). Indeed, extensive scholarship on William Gibson is limited to: Lance Olsen's *William Gibson* (1992), Tom Henthorne's *William Gibson: A Literary Companion* (2011), Gerald Alva Miller's *Understanding William Gibson* (2014), two

books examining specific concerns Cavallaro's *Cyberpunk and Cyberculture (*2000), Rapatzikou's *Gothic Motifs in the Fiction of William Gibson* (2004), and Carl B. Yoke and Carol L. Robinson's essay collection *The Cultural Influences of William Gibson, the Father of Cyberpunk Science Fiction* (2007). That being said, there are a numerous journal articles devoted to Gibson, however most concentrate specifically on *Neuromancer*. Due to its innovative literary style, *Neuromancer* has become something of a touchstone for academic literature on cyberpunk, virtual reality, and the posthuman condition. To this end, Gibson's debut novel is still his most intensively reviewed work. Yet, the evolution of Gibson's literary style occasioned a continuous discussion of genre classifications. I discuss the reception of each trilogy in more detail in chapter 3.

I argue that discussions of the extraordinary body have been perfunctory because most criticism has reiterated views of the disabled figure as either broken and in need of repair, or empowered along posthuman and cyborg lines, thus neglecting institutionalized oppression and medicalized constraint. My study of Gibson's work aims to address this critical gap. As Westfahl notes, Gibson "is most comfortable with characters who neither embrace nor reject innovations but, like Gibson himself, simply adjust to them while carrying on with everyday life" (6). This adjustment to technological innovations is performed first and foremost on the stage of the human body and thus negotiates a cognitive and emotional ambivalence towards the technologization of the body on a visceral level. My refashioning of Gibson as a writer of the extraordinary body is preceded by Cavallaro's excellent study of cyberpunk, which is one of the few to recognize the body's centrality to, and ambiguity in, Gibson's work. Cavallaro states,

> On the one hand, the fusion of the biological and the technological signals the disappearance of the body, its reduction to lifeless meat. On the other, it opens up fresh opportunities for experiment, recombination and play … Though the physical dimension is often marginalized by digital technology, both the biological body and the body of the posturban megalopolis go on presenting eminently material traits, intensified by their lacerations and vulnerabilities. The bodies generated by cyberpunk are simultaneously mythological, as products of imagination and fantasy, technological, as products of science and ideology, and Gothic, as products of psychotic and fragmented environments, of physical and mental disarray, of deviance and transgression (xv).

Instead of castigating previous receptions of Gibson's work for overlooking the literary mechanisms of the (re-)production of disability by the criteria of an academic disability studies informed understanding of the body, it is my aim to resume the modest beginnings of discussion regarding Gibson's fictional bodies. I will do this by reassessing the depictions of extraordinary embodiment with regard to medical, cultural, and sociological concepts of disability that are individually introduced in chapter 2 of this book.

My discussion peripherally borders on what N. Katherine Hayles popularized as "the posthuman." Especially in publications such as Cary Wolfe's *What is Posthumanism?* (2010), Patricia MacCormack's *Posthuman Ethics* (2012) and Rosi Braidotti's *The Posthuman* (2013), it is persistently the specter of disability that is evoked as the preeminent site for the negotiation of cultural and political transformations of human embodiment in the age of intelligent machines. In delineating representations of extraordinary bodies, beginning with Gibson's

depiction of a prosthetic future in the Sprawl trilogy and moving on to the modalities of what might be called a processual present in the Bigend trilogy, this study traces a transformation in the conception of what it means to be technologically extended. Instead of reinforcing what Elaine L. Graham has termed the, "'ontological hygiene' separating human from non-human, nature from culture, organism from machine," prosthetic embodiments in Gibson's later fiction will thus be revealed to exhibit unexpected affirmative and emancipatory potential that goes far beyond the common science fiction motif of the technologically enhanced superhuman (35).

Burning Chrome: Early Elements of Extraordinariness

THE BODY IN PROSTHETICS

The title of Gibson's short story "Johnny Mnemonic" indexes the vital role of memory for the characterization of its protagonist. However, the narrative focuses not so much on Johnny's ability to preserve or recall his past experiences, but rather showcases in a truly cyberpunk manner how a neural implant endows the character with the capacity to store additional mostly sensitive or criminal data. The central conflict of the story arises when Ralfi, one of Johnny's customers, is unwilling to retrieve his data, and exploits the character for "data laundry." Uncommon to the narrative situations of Gibson's novels, his short fiction tends towards first person narration. Johnny recounts

> I had hundreds of megabytes stashed in my head on an idiot/savant basis, information I had no conscious access to. Ralfi had left it there. He hadn't, however, came back for it. Only Ralfi could retrieve the data, with a code phrase of his own invention. I'm not cheap to begin with, but my overtime on storage is astronomical (15).

Throughout Johnny's quest to get things straight with a Ralfi, the portrayal reduces him to his function as an external data storage unit, a "blind receptacle to be filled with other people's knowledge" which can only be retrieved with a password the customer determines (32). To guarantee data security, Johnny is programmed to play it back in "synthetic languages" he himself does not understand. The stand-off between Johnny and Ralfi is interrupted by street fighter Molly Millions, who sees a job opportunity in offering her services as bodyguard to the highest bidder. It is Johnny who takes this chance to save his life. Molly, herself prosthetically enhanced by "surgical inlays" in both hands and eyes, joins Johnny on his mission (19). Eventually, she succeeds in removing the data out of his system by introducing him to a drug addicted ex-military dolphin who hacks Ralfi's password and successfully initiates the playback. All Johnny remembers from the incident is that "it all faded to cool gray static and an endless tone poem in the artificial language. I sat and sang dead Ralfi's stolen program for three hours" (27). Essentially, this character embodies functionality instead of personality—a depiction buttressed by an understanding of the body as a machine which can be broken and repaired, made from individual parts that can be replaced, added, or removed.

Echoing the misanthropic, brilliant, and disabled main character of Heinlein's short story "Waldo" (1942), Gibson's short story "Burning Chrome" features a protagonist named "Automatic Jack," who is distinctly marked by a prostheticized

corporeality. Depending on the prioritization of function or appearance, Jack alternates between his automatic "waldo," and arm prosthesis. Jack's name signifies his identity, which in turn equals his function. Reduced to the functionality of his waldo to conduct precise micro repairs, Jack is indeed a "jack-of-all-trades," and signifies the practicality of the body. Jack's associate and computer cowboy Bobby on the other hand represents the mind of the duo. Jack introduces them as

> Bobby Quine and Automatic Jack. Bobby's the thin, pale dude with the dark glasses, and Jack's the meanlooking guy with the myoelectric arm. Bobby's software and Jack's hard; Bobby punches console and Jack runs down all the little things that can give you an edge (197).

By foregrounding how the functional roles of the characters are inscribed in their bodies, the narrative dispenses with a profound depiction of their experience of embodiment. As Westfahl realizes with regard to the Sprawl trilogy, "none of Gibson's characters spend any time pondering the implications of such innovations … they have 'no imagination.' Body modifications are accepted without comment" (68).

The prosthetic enhancement of ability or restoration of bodily function, albeit central, is but only one incentive for the body modifications portrayed in Gibson's short fiction. Motivations range from the cosmetic heightening of beauty ideals to the intensification of physical pleasure, or the permanent enactment of fetishism. All of which do not target the approximation, but rather the deliberate deviance from, an assumed norm. Mocking the hyper-masculinity of "muscle-boys," the protagonist of "Johnny Mnemonic" observes how a group of men "were flexing stock parts at one another and trying on thin, cold grins, some of them so lost under superstructures of muscle graft that their outlines weren't really human" (15). Even more outlandish are the "Magnetic Dog Sisters," who live out fetish fantasies through full-body change. Johnny notes:

> They were two meters tall and thin as greyhounds. One was black and the other white, but aside from that they were as nearly identical as cosmetic surgery could make them. They'd been lovers for years and were bad news in the tussle. I was never quite sure which one had originally been male (14-5).

Such a mechanical vision of the body as having unlimited possibilities in prosthetic re-assemblage, implies the idea that like a machine, the body can be hacked or disabled. In his attempt to threaten Ralfi by force, Johnny is immobilized by a "neural disruptor":

> I put everything I had into curling the index finger of my right hand, but I no longer seemed to be connected to it. I could feel the metal of the gun and the foam-padded tape. I'd wrapped around the stubby grip, but my hands were cool wax, distant and inert (17).

Gibson illustrates here how once the electric circuitry of the body is interrupted, control is also disabled.

Furthermore, Gibson's descriptions are profoundly technical as manifested in neural disruptors, "[s]uperconducting quantum inference detectors" or "parabolic microphones and lasers" (23). With regard to the representation of the body, Gibson's language thus relies on notions of the machine as much as it simultaneously works

within a medical register. Johnny describes how the "stored data are fed in through a modified series of microsurgical contraautism prostheses," and refers to his condition as an "idiot-savant" mode (22). This terminology bears on a distinct history of medical classification schemes, particularly the eugenic typology of humans of the late nineteenth and early twentieth century. Moreover, this terminology characterizes Gibson's Sprawl novels by undergirding the representation of extraordinary bodies.

THE BODY IN CONTEXT

In contrast to Johnny Mnemonic, who remains mainly unconcerned about body modifications, Automatic Jack reveals various instances of critical reflection upon the interpersonal reactions of others to his embodiment, as well as the potential drawbacks of technological enhancement. Ultimately, Jack realizes the success of surgical operations is not guaranteed. When Jack encounters his beloved Rikki in a café, next to her sits "a boy with Sendai eyes, half-healed suture fines radiating from his bruised sockets" ("Burning Chrome" 211). Herself aspiring the implantation of camera lenses and recording gear instead of her eyes, Rikki emulates media superstar Tally Isham, "the Girl with the Zeiss Ikon Eyes." Jack, however, is deeply concerned and warns Rikki, that the boy's "optic nerves may start to deteriorate inside six months. You know that, Rikki? Those Sendais are illegal in England, Denmark, lots of places. You can't replace nerves" (211-2). In contrast to Jack's arm prosthesis, the replacement of nerves appears impossible despite how advanced biotechnology might be. While characters do not reflect on their technologized identity, they consider the possibly negative outcomes of the hybridization of body and machine. Characteristic of cyberpunk depictions of biotechnology does not, as Cavallaro remarks, "make the body stronger and more durable. If anything, it shapes it on the model of the commodity doomed to planned obsolescence" (92). Johnny Mnemonic concludes at the end of story that "one day [he]'ll have a surgeon dig all the silicon out of [his] amygdalae, and [he]'ll live with [his] own memories and nobody else's, the way other people do. But not for a while" (36). It took Gibson a decade of work before his characters began to make, keep, reflect on, and above all, fully appreciate their lived embodied memories. Most notably, we see this in the character of Keith Allen Blackwell of the Bridge trilogy. Unlike Johnny, Blackwell's memories are personal and leave physical traces as reflections of his life story. There is another mirror image of Johnny Mnemonic in Gibson's later fiction. As Tatsumi observes, "Gibson has been obsessed with the role of the courier who carries information around without knowing what it is; all Johnny does is not to know but carry" (116). The Bridge trilogy features Chevette Washington as another human carrier of information. This time, however, as an analog version in the form of a rebellious teenager girl bike messenger.

Moreover, "Burning Chrome" introduces the gaze as a means of interaction between characters.

> I was working late in the loft one night, shaving down a chip, my arm off and the little waldo jacked straight into the stump. Bobby came in with a girl I hadn't seen before, and usually I feel a little funny if a stranger sees me working that way, with those leads clipped to the hard carbon studs that stick out of my stump. She came right over and looked at the magnified image on the screen, then saw the waldo moving under its vacuum-sealed dust cover.

> She didn't say anything, just watched. Right away I had a good feeling about her; it's like that sometimes ("Burning Chrome" 201).

The fact that Jack consciously evaluates the girl's reaction, and more specifically the way she observes his arm prosthesis reveals two things. First, it is noteworthy that to him, his body is not problematic. At no point in the narrative is Jack concerned about, or bothered by, his prosthesis unless he is in the company of strangers. Discomfort does not arise from an alleged deficiency of the body itself but instead it is somebody's stare that can cause uneasiness. While Jack is generally comfortable with Rikki, when she asks "[w]hat happened to your arm?" in public Jack gets uncomfortable (203). Feeling exposed, he answers brusquely that it was an accident. Only the reader is let in on the full extent of his discomfort by his narration: "I don't remember how I changed the subject, but I did" (203). As it turns out, Rikki is attracted to Jack and shows no signs of fear of contact. Jack notes,

> [a]nybody else ever touched me there, they went on to the shoulder, the neck … But she didn't do that. … And her hand went down the arm, black nails tracing a weld in the laminate, down to the black anodized elbow joint, out to the wrist, her hand soft-knuckled as a child's, fingers spreading to lock over mine, her palm against the perforated Duralumin (204-5).

Moreover, Jack shows a playful, even humorous, way of dealing with his arm prosthesis as he "snapped [his] Duralumin fingers for [Rikki]" or purposefully teases the Finn, a street dealer of all sorts of spare and stolen goods (202).

> I let my arm clunk down on the table and started the fingers drumming; the servos in the hand began whining like overworked mosquitoes. I knew that the Finn really hated the sound. 'You looking to pawn that?' he prodded the Duralumin wrist joint with the chewed shaft of a felt-tip pen. 'Maybe get yourself something a little quieter?' (199).

Unlike Johnny Mnemonic, Automatic Jack shows moments of individual reflection and social mediation with regards to his embodiment. This not only adds another layer of complexity to the narrative, but also reveals that despite the pervasiveness of body alterations, these physical differences are still consciously registered by characters, further implying another normative system outside the hacker subculture Gibson portrays. Jack's uncomfortable reaction to another characters' stare condensed in the statement "I thought he spent too long on my arm" shows the ways in which prostheses have not fully entered the invisible realm of the norm (212). Gibson's characters are at times fascinated by bodily differences, and at other times troubled by bodily deviances. This ambivalence remains a vital characteristic throughout his work.

In addition, "Burning Chrome" problematizes the relation between body and prosthesis by questioning the extent to which the machine counts as an integral part of the body. Throughout the narrative which follows hacker duo Bobby and Jack on their quest to "burn Chrome," that is to break into and rob the computer system of the known criminal Chrome, Jack refers to the prosthesis simply as his arm. He explains that the prosthesis is not only a consciously used tool for handyman work, but also a body part that is integrated into the circuitry of impulses and thus unconsciously his "arm convulsed, started clicking, fear translated to the myoelectrics through the

carbon studs" (208) or on the contrary sometimes his "arm forgot to click" (210). This ambivalence also pervades interactions with Rikki. In one scene, Jack recounts how he "nodded, watching the arm swing up to take her hand; it didn't seem to be part of me at all, but she held on to it like it was" (219). Inclined towards ocular implants herself, Rikki begets the unequivocal acceptance of his prosthetic body while it is Jack who appears doubtful about the integrity of his body.

When Jack points to the limitations that result from his missing organic arm, such as in rubbing "sleep from [his] eyes with [his] left hand, one thing [he] can't do with [his] right," these barriers are of a personal almost banal nature, and socio-politically irrelevant (207). By contrast, a passage in "Johnny Mnemonic" points to the ways in which the rules and norms of subcultures inform the body and re-configure the acceptance of deviations. Molly introduces Johnny to the community of Lo Teks, "Low technique, low technology" she clarifies (28). Embedded in an intricate network woven of strings, cables, and all sorts of clutter gathered from the Sprawl, the Lo Teks live way above the shanty towns of Nighttown. When Johnny meets his first Lo Tek he is astonished by the boy's extraordinary body:

> In the narrow beam of her taped flash, he regarded us with his one eye and slowly extruded a thick length of grayish tongue, licking huge canines. I wondered how they wrote off tooth-bud transplants from Dobermans as low technology. Immunosuppressives don't exactly grow on trees. 'Moll.' Dental augmentation impeded his speech. A string of saliva dangled from the twisted lower lip. 'Heard ya comin'. Long time.' He might have been fifteen, but the fangs and the bright mosaic of scars combined with the gaping socket to present a mask of total bestiality. It had taken time and a certain kind of creativity to assemble that face, and his posture told-me he enjoyed living behind it. He wore a pair of decaying jeans, black with grime and shiny along the creases. His chest and feet were bare. He did something with his mouth that approximated a grin. 'Bein' followed, you' (28).

The depiction of the Lo Tek displays how deviance from dominant cultural norms may become popular and desirable. Furthermore, this depiction examines how individual bodies align with subcultural sets of rules, be it in the form of the Doberman teeth or another implantation. Molly's move to go to the Lo Teks is strategic. As it turns out, during the confrontation with Ralfi, the data stored in Johnny's memory is stolen from the Japanese criminal organization Yakuza. Not wanting their data revealed, a Yakuza assassin follows them in order to eliminate Johnny. The Yakuza's "nervous system's jacked up… mostly grown in a vat in Chiba City," and his weapon is a monomolecular wire from his prosthetic thumb (21). As Johnny recounts,

> they must have amputated part of his left thumb, somewhere behind the first joint, replacing it with a prosthetic tip, and cored the stump, fitting it with a spool and socket molded from one of the Ono-Sendai diamond analogs. Then they'd carefully wound the spool with three meters of monomolecular filament (20).

Molly lures the Yakuza assassin to the Lo Teks' fighting arena, the so-called Killing Floor, for their final face-off. Gibson presents the Killing Floor with a meticulous precision regarding the exact materials and styles worked into the setting.

> The Killing Floor was eight meters on a side. A giant had threaded steel cable back and forth through a junkyard and drawn it all taut. It creaked when it moved, and it moved constantly, swaying and bucking as the gathering Lo Teks arranged themselves on the shelf of plywood surrounding it. The wood was silver with age, polished with long use and deeply etched with initials, threats, declarations of passion. This was suspended from a separate set of cables, which last themselves in darkness beyond the raw white glare of the two ancient floods suspended above the Floor. A girl with teeth like Dog's hit the Floor on all fours. Her breast were tattooed with indigo spirals. Then she was across the Floor, laughing, grappling with a boy who was drinking dark liquid from a liter flask. Lo Tek fashion ran to scars and tattoos. And teeth. The electricity they were tapping to light the Killing Floor seemed to be an exception to their overall aesthetic, made in the name of... ritual, sport, art? I didn't know, but I could see that the Floor was something special. I had the look of having been assembled over generations (31-2).

What later in Gibson's career will be recognized as a passion for the description of settings and objects, is already discernible (if only in retrospect) in his depiction of the Killing Floor which appears more like another character rather than a mere background architecture. This interest has found expression in Gibson's experimental short story "Thirteen views of a Cardboard City" (1996), which consists of thirteen poetic observations of a homeless shelter in the middle of a Tokyo subway station, thus renouncing narrative essentials such as plot, conflict, and protagonist. Moreover, as Gibson told Rapatzikou in an interview in 2004, "one of the things that frustrated me about science fiction was a poverty of sensory detail," so that in his own writing he aspired after "a sort of hyper specificity" ("Interview with William Gibson" 222). This interest in heterogeneous self-organizing settings is taken further in Gibson's novels and comes particularly into effect in his fourth novel *Virtual Light* through the introduction of the San Francisco-Oakland Bay Bridge. The Bridge, as much as the Floor, partakes actively in the respective story's action. All sorts of actors become visible in the showdown between Molly and the Yakuza assassin: cables, plywood, the audiences' cheers, the electronic beat, and the vibrations of the floor. Johnny's indecisiveness regarding the purpose of the Floor – whether it was for ritual, sport, or art – is mirrored in the fight's atmospheric blend of a boxing match and tribal fight:

> And then I noticed just how quiet the Lo Teks had become. He was there, at the edge of the light, taking in the Killing Floor and the gallery of silent Lo Teks with a tourist's calm … Molly hit the Floor, moving. The Floor screamed. It was miked and amplified, with pickups riding the four fat coil springs at the corners and contact mikes taped at random to rusting machine fragments. Somewhere the Lo Teks had an amp and a synthesizer, and now I made out of shapes of speakers overhead, above the cruel white floods. A drumbeat began, electronic, like an amplified heart, steady as a metronome … She began to dance. She flexed her knees, white feet tensed on a flattened gas tank, and the Killing Floor began to heave in response. The sound it made was like a world ending, like the wires that hold heaven snapping and coiling across the sky. He rode with it, for a few heartbeats, and then he moved … He pulled the tip from his thumb with the grace of a man at ease with social

> gesture and flung it at her. Under the floods, the filament was refracting thread of rainbow. She threw herself flat and rolled, jackknifing up as the molecule whipped past, steel claws snapping into the light in what must have been an automatic rictus of defense. The drum pulse quickened, and she bounced with it, her dark hair wild around the blank silver lenses, her mouth thin, lips taut with concentration. The Killing Floor boomed and roared, and the Lo Teks were screaming their excitement ... And Molly seemed to let something go, something inside, and that was the real start of her mad-dog dance. She jumped, twisting, lunging sideways, landing with both feet on an alloy engine block wired directly to one of the coil springs (31-4).

Unable to process the situation so quickly, Johnny is in culture shock watching Molly fight, the Lo Teks cheer, and the Floor vibrate.

> I cupped my hands over my ears and knelt in a vertigo of sound, thinking Floor and benches were on their way down, down to Nighttown, and I saw us tearing through the shanties, the wet wash, exploding on the tiles like rotten fruit. But the cables held, and the Killing Floor rose and fell like a crazy metal sea. And Molly danced on it. And at the end, just before he made his final cast with the filament, I saw in his face, an expression that didn't seem to belong there. It wasn't fear and it wasn't anger. I think it was disbelief, stunned incomprehension mingled with pure aesthetic revulsion at what he was seeing, hearing - at what was happening to him. He retracted the whirling filament, the ghost disk shrinking to the size of a dinner plate as he whipped his arm above his head and brought it down, the thumbtip curving out for Molly like a live thing. The Floor carried her down, the molecule passing just above her head; the Floor whiplashed, lifting him into the path of the taut molecule. It should have passed harmlessly over his head and been withdrawn into its diamond hard socket. It took his hand off just behind the wrist. There was a gap in the Floor in front of him, and he went through it like a diver, with a strange deliberate grace, a defeated kamikaze on his way down to Nighttown. Partly, I think, he took that dive to buy himself a few seconds of the dignity of silence. She'd killed him with culture shock (34-5).

What is striking about this fight between high and low technology is that it is not primarily the abilities or inabilities of the two prosthetically enhanced fighters that lead to their success or defeat. Molly lures her opponent to a specifically chosen setting, to a literally tightly knit community, and what ultimately defeats the Yakuza is not Molly's fighting skills alone but also the heaving floor, the "deviant" creatures' shouts, the roaring beat, and even the communal act of culture shock. As I argue in chapter 4.2 and 4.3, Gibson illustrates how abilities, and by implication disabilities, are dependent on the specific social and material constellations individuals are suspended in.

THE BODY IN ARTICULATION

Gibson's short story "The Winter Market" is set in a near-future Vancouver. The central conflict of the story arises when Casey, editor of the "Autonomic Pilot,"

encounters the disabled character Lise at a mutual friend's (Rubin) party. More intensely than in "Burning Chrome", Gibson explores the gaze:

> First time I saw her: She had the all-beer fridge open, light spilling out, and I caught the cheekbones and the determined set of that mouth, but I also caught the black glint of polycarbon at her wrist, and the bright slick sore the exoskeleton had rubbed there. Too drunk to process, to know what it was, but I did know it wasn't party time. So I did what people usually did, to Lise, and clicked myself into a different movie. Went for the wine instead, on the counter beside the convection oven. Never looked back (143-4).

This scene portrays a small moment of social exclusion on the grounds of disability. Casey detects Lise's non-normative body and shuns her in revulsion. Characters who encounter Lise get into "social panic" and dodge her (144). Incited by Casey's evasion, Lise seeks to confront him. He recounts, "she found me again. Came after me two hours later, weaving through the bodies and junk with that terrible grace programmed into the exoskeleton" (144). Casey's perception of Lise is characterized by the association of disability with passivity, as well as a victim position. He even corrects himself in his observation of how she moves towards him: "Lise advanced was advanced, with that mocking grace straight at me now… The exoskeleton carried her across the dusty broadloom" (144). These statements clearly present the disabled body as entirely passive; it is only the machine that acts. In order to attain a deeper understanding of the story, the narrative perspective needs to be taken into account, as it is Casey and not Lise herself who bemoans immobility.

> She couldn't move, not without that extra skeleton, and it was jacked straight into her brain, myoclectric interface. The fragile-looking polycarbon braces moved her arms and legs, but a more subtle system handled her thin hands, galvanic inlays. I thought of frog legs twitching in a high-school lab tape, then hated myself for it (145).

The analogy of Lise having remotely operated frog legs posits her as an immobile test object, an inanimate doll, instead of an individual with subjectivity and agency and who is enabled or empowered by the exoskeleton. Medical notions of the body's functionality, and cultural notions of technological remedy, inform Casey's perception. When Lise appears in front of him at the party, he is rendered speechless by her confrontation.

> Looked into those eyes and it was like you could hear her synapses whining … 'Take me home,' she said, and the words hit me like a whip. I think I shook my head. 'Take me home.' There were levels of pain there, and subtlety, and an amazing cruelty. And I knew then that I'd never been hated, ever, as deeply or thoroughly as this wasted little girl hated me now, hated me for the way I'd looked, then looked away, beside Rubin's all-beer refrigerator (144).

Against his will, and out of pity and shame, he does take her home. There, she discovers all his editing equipment and demands he records her dreams, which he does because "she claimed she was an artist, and because [he] knew that [they] were engaged, somehow, in total combat, and [he] was not going to lose" (147). The so-called "dry dreams" are a

> neural output from levels of consciousness that most people can only access in sleep. But artists, the kind I work with at the Autonomic Pilot, are able to break the surface tension, dive down deep, down and out, out into Jung's sea, and bring back well, dreams (146).
>
> It probably took all of four seconds. And, course, she'd won. I took the trodes off and stared at the wall, eyes wet, the framed posters swimming. I couldn't look at her. I heard her disconnect the optic lead. I heard the exoskeleton creak as it hoisted her up from the futon. Heard it tick demurely as it hauled her into the kitchen for a glass of water. Then I started to cry. (148-9)

Casey has no script for how to process this experience. Bypassing the recipient's preconceptions of her disabled embodiment and her art, Lise's dreams directly target affect so that language fails to describe them: "[w]ords. Words cannot. Or, maybe, just barely, if I even knew how to begin to describe it, what came up out of her, what she did" (148). Casey emphasizes that *Kings of Sleep* enriches his "vocabulary of feelings" (148). In his reflection upon Lise's artistic dreams, Casey draws on a dualistic notion of body and mind only to equate, in an ableist manner, the constrained condition of her body by the prosthesis to that of her art confined by her mind. In Casey's view, *Kings of Sleep* was "locked up in her head the way her body was locked in that exoskeleton" (153). When played back to Casey's supervisor, the latter is similarly affected and in realizing Lise's talent in terms of its market value, he immediately signs her. As Casey dryly remarks, "so we can package it, sell it, watch how it moves in the market" (147). Many of Gibson's following narratives encompass the criticism of commodification, and the Bigend trilogy in particular explores the strategies which turn art and fashion into market values.

Nonetheless, Casey remains utterly ambivalent regarding Lise. Once he describes how "Lise was amazing. It was like she was born to the form, even though the technology that made that form possible hadn't even existed when she was born" (154). Then again, he sounds disgusted by her: "I have just spent three weeks editing the dreams and nightmares of one very screwed up person" (161). It is the oscillation between attraction and revulsion that characterizes her abject nature. In order to mitigate this reaction towards Lise, Casey's company hires stylists to change her hair and replace her clothing. By "hiding the polycarbon ribs" they hope her to "pass" (157). The sociological concept of "passing" is historically associated with race but has been extended to age, religion, class, gender, and disability in discourse. With regard to disability, "passing" describes the suppression of abnormal behavior or concealment of the social markers of impairment in order to be recognized as a member of a different identity group and in order to increase status, privilege, and acceptance (Brune and Wilson, *Disability and Passing* 2013). Lise's agents also "brought in medics, who padded the polycarbon with foam and sealed the sores over with micropore dressings. They pumped her up with vitamins and tried to work on her diet" ("The Winter Market" 155). Nevertheless, Casey observes that "[p]ropped up in the exoskeleton, she was looking worse than she had that first night, at Rubin's," and the attempt to pass fails (156). While readers are not granted any explicit insight into Lise's perspective, Casey observes how she keeps her jacket "zipped to the neck, always, even though it was too warm in the studio" (157). One can thus conclude that

she is uncomfortable with her body due to ableist looks, reactions, attitudes, and the overall stigma of her disability, rather than the prosthesis or sores themselves.

In their initial confrontation of lust and disgust, Casey intentionally attacks Lise when she repeatedly asks whether they are "going to make it." Offended, he decides he "wasn't going to take it" and recounts how he "cold-eyed her from somewhere down in the beer-numb core of my walking, talking, live-limbed, and *entirely ordinary body* and the words came out of me like spit: 'Could you feel it, if I did?'" (146, emphasis added). To which Lise coldly responds that she sometimes likes to watch. As a non-disabled character, Casey appears on the one hand unsettled by her physical deviance, and on the other hand assumes deep misery on Lise's side. This reveals the dominant non-disabled perspective that disabled people, in the words of Alison Hartnett "can never be happy as they are and must change in order to be accepted and valued" (22). Lise's change occurs when she commits suicide and the narrative initially questions the notion of liberation through technology but ultimately subverts the notion. Oftentimes disabled figures in literature serve the purpose of reassuring the protagonist, as well as reader, of their normal embodiment. As chapter 4.3 of this book shows, Gibson's narratives do not grant such reassurance to either protagonists or readers. As I will show, Casey is just as much irritated with himself about his ordinary body and ordinary life.

Ambiguity surrounds Lise's suicide, as it remains unclear whether it was triggered by social exclusion, what part of her actually died, and what part the matrix conserves. Casey describes her as dead with regard to the body, yet immortal with regard to the mind. She "merged with the net" and Casey struggles with the question of whether such a disembodied state is still "*her*"—a question that surfaced in a conversation with Rubin about another artist who uploaded his mind ("The Winter Market" 140, 165). "But it's not him, is it? It's just a program," Casey wonders (153). And, Rubin can only remark, "[i]nteresting point. Hard to say" (152). As stated earlier, a negotiation of what aspect of the human constitutes their humanity is central, albeit not always overt, in Gibson's work. From the beginning, this is a question that is directed toward the body and is incrementally translated in to the analog world throughout his novels.

The fundamental subversion of the idea that Lise's digital merging is a liberating move, occurs as the protagonist realizes that the disabled body, just as any other, desires physical touch and pleasure. Spotting Lise in a bar and observing how she holds on to a boy's hand, a "hand she couldn't even feel," Casey perceives her functional biological inability according to normative standards of the human body which restricts his ability to appreciate it as a social gesture of attraction, affection, and intimacy (164). According to Casey's logic, the boy must be too drunk to realize the girl's dysfunctional body but conscious enough to notice her expensive drinks and clothes. As far as Casey is concerned, the possibility of actual interest in or attraction to Lise, is inconceivable. However, as much as Casey attempts to uphold his vision of Lise as a deviant other, what makes him cringe in this scene is not so much the horror of her non-normative body or her pitiful attempt at social inclusion, but instead a frustration with clear boundaries of separation.

> And I know something now. I know that if I hadn't happened in there, hadn't seen them, I'd have been able to accept all that came later. Might even have found a way to rejoice on her behalf, or found a way to trust in whatever it is that she's since become, or had built in her image, a program that pretends to be Lise to the extent that it believes it's her. I could have believed what Rubin

> believes, that she was so truly past it, our hi-tech Saint Joan burning for union with that hardwired godhead in Hollywood, that nothing mattered to her except the hour of her departure. That she threw away that poor sad body with a cry of release, free of the bonds of polycarbon and hated flesh. Well, maybe, after all, she did. Maybe it was that way. I'm sure that's the way she expected it to be (164).

Well cited among literary disability studies scholars, is the narrative strategy in which the disabled figure serves to elicit an epiphany in the non-disabled protagonist with regard to himself or the greater scheme of things (Mitchell and Snyder, *Narrative Prosthesis* 2014). Casey describes the moment when he "knew, once and for all, that no human motive is ever entirely pure. Even Lise, with that corrosive, crazy drive to stardom and cybernetic immortality, had weaknesses. Was human in a way I hated myself for admitting" (164). At this point, it is physical desire, as well as vulnerability, that constitutes humanity irrespective of fitting within normative notions of ability. Casey realizes that "it was true: She did like to watch. I think she saw me, as I left. I was practically running. If she did, I suppose she hated me worse than ever, for he horror and the pity in my face" (164-5).

The figuration of Casey instantiates what Margrit Shildrick defines in her essay "The Disabled Body, Genealogy And Undecidability" (2005) as "normative anxiety" (757). Lise's "Otherness" is so threatening to Casey because on the one hand it constantly underscores a devalued difference in able-bodiedness and gender while on the other hand, repeatedly allowing the recognition of alike-ness in vulnerability and desires for human contact, bonding, and physical touch. The recognition of commonality with the Other is coupled with revulsion and fascination, and the continuous oscillation between these reactions fundamentally unsettles the categories by which the human is defined. It dawns on Casey that "[w]hat we call disability is perhaps the essential characteristic of being human" (Garland-Thomson, "Integrating" 21). However, "[g]iven the explicit privileging of wholeness, independence and integrity demanded of the able-bodied subject," Shildrick elucidates, "the cultural imaginary is highly invested in fantasies of an invulnerable body" as exemplified earlier in the selection of classic science fiction novels and films ("Undecidability" 757). Gibson on the other hand, presents a protagonist who recognizes "the other within the same" which fundamentally unsettles his sense of self-identity (757). Shildrick states that "[i]t is precisely that desire to deny or disavow vulnerability that generates anxiety in the individual psyche and cultural imaginary" (767). Casey embodies this "unbearable ambivalence of not being able to definitely settle on difference" (765). This represents a major concern of the genre because, as Sterling holds, "[c]yberpunk has little patience with borders" (*Mirrorshades* xiv).

Despite the recognition of some inherent ambivalence in the depiction of Lise's disabled body, most criticism reinforces an ableist reading rather than problematizing the narrative strategy or thematizing Casey's role. For example, Westfahl notes, "[t]hroughout the story, Lise's broken, crumbling body is always on the scene (though ostensibly marginalized by cybernetics) and screaming to be released from 'the bonds of polycarbon,' yet longing for the departure to be marked by bodily contact" (91). Westfahl reads "The Winter Market" as to "marginalize…the body's materiality by turning it into a vehicle for simstim (simulated stimulation) dreams commercially edited into popular chillers and thrillers" (97). When Westfahl states that "unhappy Lise commits suicide," he does not raise the question of how social factors might have contributed to her fatal decision (49). Besides the fact that

the trope of a disabled person's death at the end of a narrative is all too commonly read along the lines of their release from physical pain, as well as burden and victimhood, I seek to re-address Gibson's bodies as otherwise.[7] I argue that the key to re-reading Gibson's bodies is the narrative perspective, which in the case of "The Winter Market" is not Lise's but Casey's. It is a male, potentially white, but certainly able-bodied, gaze that reveals an ableist and potentially sexist bias that informs the perception of certain aspects of Lise's character and not others. Thereby Gibson allows readers to reflect upon the nature of the perspectives and attitudes of his narrators rather than proposes a realistic portrayal of a "disability subjectivity", unless of course, as it is in fact the case in many of his novels the protagonists' own embodiment is extraordinary (*Narrative Prosthesis*).

"The Winter Market" provides not only a perspective on the disabled, but also a portrayal of the normal body and the normal subject position. In repeated contrast to Lise, as well as his friend and artist Rubin, Casey comes to realize his average nature. Rubin is introduced as "the master of junk" who himself "never calls the place a studio, never refers to himself as an artist" (141, 142). Instead, he describes his creative activity as "[m]essing around" (141). Rubin constructs robotic machines out of garbage and in that is modeled on American performance artist, inventor, and founder of the Survival Research Laboratories, Mark Pauline. As Kevin Kelly recounts in his chapter "Machines with an Attitude" from *Out of Control: The New Biology of Machines, Social Systems And The Economic World* (1994), "when Mark Pauline offers you his hand in greeting, you get to shake his toes. Years ago Pauline blew off his fingers messing around with homemade rockets" (29). Pauline is displaying in himself a form of extraordinary embodiment, which ultimately inspired another artist-character in Gibson's later novel *Mona Lisa Overdrive*—Slick Henry. Rubin's provocative work always contains more than a hint of irony. As Casey observes:

> I've seen Rubin program his constructions to identify and verbally abuse pedestrians wearing garments by a given season's hot designer; others attend to more obscure missions, and a few seem constructed solely to deconstruct themselves with as much attendant noise as possible" (142).

Rubin cannot explain how he comes to his kinetic sculptures, and "has nothing to say about gomi. It's his medium, the air he breathes, something he's swum in all his life" (143). This trope of the "genius artist" unable to elucidate the formation process of his own artifacts recurs frequently in Gibson's work. It is a trope that follows a Kantian notion of genius, which holds that "[s]ince the beautiful does not have a concept, the genius' originality also cannot fall under a concept that can be explained or taught. Consequently, the artist does not understand the process of creation or where the ideas that guide the work arise from" (Fry 549). Rubin pointedly explains why Casey, however, is not the artistic type:

> 'You know what your trouble is?' he says when we're under the bridge, headed up to Fourth. 'You're the kind who *always reads the handbook*. Anything people build, any kind of technology, it's going to have some specific purpose. It's for doing something that somebody already understands. But if it's new technology, it'll open areas nobody's ever thought of before.

[7] See, for instance, Nicole Markotic's *Disability in Film and Literature* (2016).

> You read the manual, man, and you won't play around with it, not the same way. And you get all funny when somebody else uses it to do something you never thought of. Like Lise' (152).

While Rubin and Lise have the ability to find their own uses for things, Casey lacks the creativity as well as the ability to defy intended purpose and accepted particular standards. This prompts Casey to recognize his "average" lifestyle and "normal" subject position.

> The burritos tasted like cardboard, but I decided I liked them because they were so aggressively normal … Sometimes it looks to me like nobody in particular lives there. Not that it's that messy; I'm a good if somewhat robotic housekeeper, and even remember to dust the tops of framed posters and things, but I have these times when the place abruptly gives me a kind of low-grade chill, with its basic accumulation of basic consumer goods. I mean, it's not like I want to fill it up with cats or houseplants or anything, but there are moments when I see that anyone could be living there, could own those things, and it all seems sort of interchangeable, my life and yours, my life and anybody's … I think Rubin sees things that way, too, all the time, but for him it's a source of strength. He lives in other people's garbage, and everything he drags home must have been new and shiny once, must have meant something, however briefly, to someone. So he sweeps it all up into his crazy-looking truck and hauls it back to his place and lets it compost there until he thinks of something new to do with it. Once he was showing me a book of twentieth-century art he liked, and there was a picture of an automated sculpture called *Dead Birds Fly Again*, a thing that whirled real dead birds around and around on a string, and he smiled and nodded, and I could see he felt the artist was a spiritual ancestor of some kind. But what could Rubin do with my framed posters and my Mexican futon from the Bay and my temperfoam bed from Ikea? (161-2)

In opposition to Rubin's and Lise's extraordinary lives, Casey's is normal in a way that makes him feel sadly interchangeable—a realization that causes disappointment and anger. In this respect, Moody notes in "Untapped Potential: The Representation of Disability/Special Ability in the Cyberpunk Workforce" that it "is the disabled characters who are often presented as having attitude whilst the general able-bodied population passively experience corporate oppression" (103).

Besides asking by what literary means bodies come to signification, my analysis is driven by the issue of who gets to speak, and whose perspective is in focus. To this effect, I will repeatedly turn my attention to the narrative perspective in order to highlight that the ways in which difference is marked implies value judgments in the attitudes and biases of specific characters. It is not my argument that by deciding against positioning the narrator outside of the narrative universe (which is generally read to purport absolute authority over truth) Gibson avoids the impression of proposing objective notion of the body (leaving aside the fact that the authorial narrative situation in the same way relies on terminologies and metaphors that involve particular sets of values). Instead, I argue that by presenting the ways of seeing and thinking about bodies as *embodied* and thus subjective, Gibson encourages a reflection of the identities of both the narrator and the narrated, the starer and the stared at as well as the nature of their relationship. This is crucial insofar as these

implicit attitudes and biases can also be read as products of a wider socio-political context. When an inquiry of the formal narrative situation is omitted then the ideology on which characterizations are based and, by extension, the construction of disability may remain unquestioned, invisible, and thereby even more powerful. On the grounds that disability has usually been overlooked in discussions of Gibson's work, it is precisely this obliviousness to the value-laden descriptions that makes them especially powerful in impacting our imagination. Therefore, my analysis focuses heavily on characterization and narrative perspective.

The meaning of social conformity is even more provocatively explored in the short story "The Belonging Kind," which Gibson co-wrote with John Shirley. Focused on Coretti, a divorced middle-aged linguistics professor who spends his evenings alone in bars drinking, "The Belonging Kind" is a straightforward outsider story. Coretti is an expert in communication but is unable to communicate with fellow human beings. However, one evening he gets into a conversation with a woman who amazes, as well as startles, him with her perfect fit in society. Notably, he is struck by her mode of behavior:

> Just the right amount of laugh. The part of Coretti that was dialectologist stirred uneasily; too perfect a shift in phrasing and inflection. An actress? A talented mimic? The word mimetic rose suddenly in his mind, but he pushed it aside to study her reflection in the mirror; the rows of bottles occluded her breasts like a gown of glass … She moves perfectly to the music and does not miss a beat in conversations—always, always fitting in perfectly (61-62, 64).

In stark contrast to this mysterious female figure, Coretti feels constantly embarrassed by his own comments, his awkward phrasing, and his "totally unconvincing tough-guy mode" (62). Upon her "too damn polite" "thank-you-for-the-drink" line, his voyeuristic impulse leads him to follow her to the street and make the striking discovery that from bar to bar she mutates and transforms her appearance. The character thus mirrors her social conformity in the materiality of her body, which changes in vocal pitch, laughter, posture as much as clothing:

> in the light of a streetlamp, like a stage lamp, she began to change … She stepped off the curb and it began. It began with tints in her hair … in three seconds she was white-blond. He was sure it was a trick of the light until her dress began to writhe, twisting across her body like a shrink-wrap plastic. … He looked back up at her and the dress was another dress, green satin, shifting with reflections. Her shoes had changed too. … Her hair had become short, spiky (62-3).

In this way "The Belonging Kind" dramatizes the adaptation to social norms via the metaphor of body alterations that pertain to appearance, age, and class. At the end of the story Coretti realizes that he is also, or at least can be, one of "them" – one of the belonging kind. By giving up his former self and mimicking the physiognomy and physiology that is considered normal for each specific context, he succeeds in "sa[ying] it right" and becoming "a real human being" (75). Gibson and Shirley's cyberpunk view on the normal body is truly terrifying. Indeed, the normal human being is the shape-shifting monster which evokes alienation in the reader. In individual contexts, the belonging kinds appear completely adequate while their overall lack of personality and ultimate heteronomy make it difficult for the reader to

identify with them while also provoking a rejection of absolute conformity to normative standards. In a similar sense, Casey's lived conformity to normative standards, which includes an ingrained ableist bias, appears if not terrifying then at least undesirable. Read in this way, Gibson's representation of the normal – i.e. male, middle-class, abled-bodied, heterosexual – body undercuts what Robert McRuer coins "compulsory ablebodiedness," in *Crip Theory*. McRuer's critique centers on the assumption "that we all agree: able-bodied identities, able-bodied perspectives are preferable and what we all, collectively, are aiming for" (9). Destabilizing the concept of the normal body, Gibson invites the reader to consider the disabled body as beyond the victim position without denying physical pain or unfulfilled desire as possible contingencies of embodiment (in general). Instead of featuring a "disabled hero" (Wendell) or "super cripple" (Barnes, *Disabling Imagery*), who successfully overcomes the limitations imposed by their disability, Gibson challenges the reader to tolerate the human body in its non-normativity, ambiguity, volatility, and interdependency because just as "[l]ife is never smooth" as the cyberpunks were acutely aware, neither is the body (Kelly and Kessel xii).

In chapter 4.1, "The Body and Medicine: The Sprawl Trilogy," I explore the representations of prostheticized bodies in *Neuromancer*, *Count Zero*, and *Mona Lisa Overdrive* to further demonstrate how these depictions rely on a bio-medical terminology that infuses bodies with bio-medical values of cure and wholeness, rehabilitation and functionality. Historicizing concepts of the normal and disabled body provides a foundation for my analysis of the literary depictions of virtual and embodied selves, whole and fragmented bodies, as well as organic and machine-bodies, in Gibson's cyberpunk trilogy. What chapter 2 will not do, however, is provide "a comprehensive history of the body." This is not only because such an undertaking would pose a profoundly different question, but also because such treatises already exist.[8] Instead, I draw on the terminological foundation for debunking deviant, non-normative, and disabled bodies of their natural or neutral character and interrogate their status as "bodies in repair." A main concern of this chapter is therefore to decouple the bodily form from its meaning by exploring the figurative forms and narrative functions which construct extraordinary bodies in the Sprawl trilogy. I argue against reading the active sculpting of the physiological apparatus of the body, as well as its projection into cyberspace, as practices of an annihilation of the material body or an aversion of its flesh. Instead, I point to an ambivalent relationship between the body and technology to highlight instances of fascination with, and pleasure in, the visceral body. Bringing both Gibson's fiction and its criticism into a productive conversation with disability scholarship, the chapter closes with the classification of the Sprawl novels as *technoromantic* fiction.

In chapter 4.2, "The Body and Society: The Bridge Trilogy," I concentrate on the intricate relationship between extraordinary bodies and their meanings in social environments. To this end, I discuss the ways in which *Virtual Light*, *Idoru*, and *All Tomorrow's Parties* partly rely on, reinforce, and defy ableist ideologies. Moreover, this chapter introduces the social model of disability as taking bio-medical conceptualizations of the body as the object of epistemological investigation. Through

[8] Michel Feher, *Fragments for a History of the Human Body* (1989), Daniel Garrison, *A Cultural History of the Human Body* (2010), Aldersey-Williams, Hugh, *Anatomies: A Cultural History of the Human Body* (2013), or specifically focusing on disability: Henri-Jacques Stiker, *A History of Disability* (1999), Elsbeth Bösl, Anne Klein, Anne Waldschmidt, *Disability History* (2010). C. F. Goodey, *A History of Intelligence and 'Intellectual Disability'* (2011).

this investigation, I examine the politics and ideologies that certain medical registers, biological classifications, sociological paradigms, legal frameworks and cultural artifacts imply, and the ways in which each partakes in the formation of ableist or eugenic structures and social barriers. Furthermore, chapter 4.2 links the issues of social participation, oppression, and the marginalization of people with that of disabilities. By understanding how Gibson shifts away from virtual networks and towards social and material interrelations in the Bridge trilogy, the social dimensions of oppressive norms of ability come into view vis-à-vis tacit communication practices, such as attitudes and gazes. In order to grasp the meaning of complex characters, such as the female Mexican disabled figure in *Idoru*, it becomes crucial to consider disability as multiaxial in order to distinguish the impact of variously interlinked subject positions. Therefore, I will supplement the social model approach with the theory of intersectionality. Moreover, my analysis diverges from the notion of abilities and disabilities as residing in an individual body's constitution and instead focuses on the ways in which abilities and disabilities depend upon a social and material context that cannot simply be understood by a nature/culture dualism.

In chapter 4.3, "The Body and Actor-Networks: The Bigend Trilogy," I examine Gibson's third trilogy, which approaches the disabled body from yet another angle. Rather than prosthetic devices or ableist social structures, *Pattern Recognition*, *Spook Country*, and *Zero History* depict the interrelations of the extraordinary body with human and non-human actors. In this way, these novels are queering dualisms between subjects and objects, active and passive, and living and inert matter in terms of agency. The ways in which the human body is made and unmade, articulated and accommodated, through processes of interrelation with all kinds of heterogeneous entities comes to fore. Moreover, in *Pattern Recognition* and *Zero History* the trope of the female disabled genius artist is re-fashioned through a character whose art deeply affects the people in the novels. I argue that these narrative situations differ drastically from his earlier work because these later narratives embody the perspective of the extraordinary figure.

In order to conceptualize the ways in which bodies interrelate with humans and non-humans, material and immaterial entities, and conceive of this formative process as the *articulation* of bodies, I draw on science and technology studies to address disability by way of actor-network theory. Actor-network theory reduces differences and hierarchies for the purpose of allowing all characters, all factors, or simply all actors that make a difference come into view. In reaching great proximity to the processes of the body, Gibson develops what I call a *new realist* style of the body.

2. The Extraordinary Body in Theory

2.1 The Body and Medicine

2.1.1 The Normal Body

Before we can fully understand the disabled body, we need first to turn to its invisible, seemingly neutral, and natural Other: the normal, medial, average body. As disability studies scholar Lennard Davis says, the locus of the problem, "is not the person with disabilities; the problem is the way that normalcy is constructed to create the 'problem' of the disabled person" ("Constructing Normalcy" 3). By drawing on Davis' and Jürgen Link's approaches to normalcy, I begin this chapter by historicizing the concept of "the norm" in relation to the human body. Next, I will discuss the role that literature, particularly the novel, plays in the construction of normal and disabled bodies. This background will lay the foundation for the analysis of William Gibson's extraordinary figurations in the Sprawl trilogy.

Historically, it is possible to accurately pinpoint when the term "the norm" entered the English language. In *Enforcing Normalcy: Disability, Deafness and the Body* (1995) and "Constructing Normalcy: The Bell Curve, the Novel, and the Invention of the Disabled Body in the Nineteenth Century" (2006), Davis explains how the initial linguistic manifestations of "the norm" in the sense of "constituting, conforming to, not deviating or different from, the common type or standard, regular, usual" can be traced to a period between 1840-1860 ("Constructing Normalcy" 3). This includes related terminology such as: normal, normalcy, normality, normativity and so on. This conceptual and linguistic moment of emergence shows that the notion of the norm is less a universal and ahistorical condition of human nature, than it is a developing feature of a particular society. "The norm" first appears in demographics and medical disciplines. For instance, "the application of numbers to illustrate the natural history of health and disease" was central to medical statistics in 1829 (Porter 24). Soon the methods of data collection, averaging, and probability calculations became common practice in scientific, political, and economic sense making. There have been multiple drivers of this term's occurrences and mechanisms of its dissemination. The late eighteenth and early nineteenth century saw significant social developments in the form of industrialization, modern mass production, modern data collection, and statistics. Because leading members of British statistical societies were industrialists or had close ties to industry, concepts regarding statistics, industry and the body became inextricably linked. Once the idea of "the norm" further migrated to conversations of everyday life, the ideological consequences for private and public life became innumerable.[9]

[9] While not founded on the notion of *the norm*, there was, of course a thorough conceptualization of health and disease prior to the eighteenth century. The Socratic notion of health and disease can be roughly summarized in the distinction of an inner space delineated through a defense against the outer space (Wallen 2016). Martin Wallen points out that much of the Socratic notion is a tautological definition, since health is understood as the absence of disease while disease is defined as the opposite of well-being. Health and disease, understood in an absolute polarity, are regarded as ideal standards that need to be maintained while being constantly threatened from the outside. Health is a singular, static, orderly condition that importantly mirrors the moral quality of ethical integrity. This is in contrast to the plurality of diseases, which entail ethical chaos, bodily and moral instability, and the dissolution of integrity and identity. These Socratic notions fueled later conceptualizations of health, disease, and disability in Western culture.

In *Versuch über den Normalismus. Wie Normalität produziert wird* [*An Approach to Normalism. How Normalcy is Produced*; my translation] (2006), German literary scholar Jürgen Link presents an extensive study of normalcy. By means of a careful discourse analysis, Link systematically unfolds the semantic field of "the normal" and traces it back to the eighteenth century. Moreover, Link carefully describes the advent and structures of dissemination for the concept of "the normal". Link arrives at the conclusion that "the normal" is not an isolated idea, but an extensive and complex discursive field. In everyday conversations "the normal" manifests in the form of stereotypes, truisms, idioms, and laymen's terms. Most notably, Link explains how the idea of the norm has travelled between discourses. Specialized discourses – such as medicine, psychology, sociology and their respective practices – are constituted by scientific knowledge for a specialized audience, acute attention to terminological differentiations, and a foundation in data and statistics. These specialized discourses each describe and produce a certain reality, or a *sectoral normality*. These medical, psychological, and sociological normalities are translated into common cultural notions of normality through what Link calls "interdiscourses". Eventually, these notions become ordinary and naturalized. "The normal" is accepted as "fact" and becomes the benchmark for assessing the lives of modern occidental subjects. Together, all three types of discourses form an interactive network, a broad cultural phenomenon Link refers to as "normalistic complex."[10]

Clarification of the German term *Normalität* is required for English speaking readers to fully understand Link's explanation of the normalistic complex because the English language contains both "normality" and "normalcy." Link uses the former to refer to psychological states of individuals and the latter to index collective social or political conditions. Both normalcy and normality, according to Link, are historically specific achievements of modern Western societies, which never before existed, and even today, in numerous societies and cultures do not exist. However, Link is not always consistent in following this distinction, a distinction that Davis does not even make. The Oxford English Dictionary defines the term "normality," which emerged in 1839 and the term "normalcy," which appeared slightly later in 1857 and is mainly used in North America. Although its frequency in use is very low, the OED also suggests a third variation deemed "normalness". In my analysis, I will adopt the term *normalcy*, since it is the broadest and most common of the three variations. I use this term in a sense of a collective socio-political normalcy that encompasses, among other things, individual normalities.

Discursive concepts, academic models, and everyday practices instigate a process of "making normal" in society. The production and reproduction of normalcy is commonly referred to as "normalization." According to Link, it is within everyday conversations, i.e. the elementary discourse that people ask themselves whether something is normal or not and as a significant consequence adjust their behavior accordingly. (*Versuch* 20) Drawing on a collection of public statements in newspapers, interviews, and speeches, Link makes the observation that historical moments of crisis are oftentimes not met with the insistence on democracy or justice but rather a promise of normalcy.[11] As I show in the course of this chapter, such

[10] As a whole this discursive field is also referred to as "normalism" by Link.

[11] Link exemplifies: "President Bush Jr. said in his speech to the Nation on 20 September 2001: 'It is my hope that in the months and years ahead life will *return almost to normal*.' As several observers remarked, he hereby nearly quoted his predecessor, Warren G. Harding, who ran and won the first presidential campaign after World War I with the slogan '*Back to Normalcy'*. And here is the central message of President Obama's Wall Street Speech to the Nation on 14 September 2009, exactly one

promise of the return to normalcy is also a common strategy in depictions of people with disabilities. That is, disability is often conceived as a moment of crisis calling for repair and the return to a state of normalcy.

Link's central argument, that normalcy is an emergent cultural phenomenon of modern Western societies rather than an anthropological constant, demands first of all categorical differentiation of some of the derivatives of "normal." In order to specify his subject matter, Link resorts to the Foucaultian principle of inequations. The first two of Link's six inequations[12] will be of prime interest to this book. First, there is the central difference between "the normal" and "the normative". Normativity is an abstract category for the entire field of "norms." Drawing on interpretations from the disciplines of ethnology, anthropology and sociology, Link concludes that all human societies possess and have possessed norms in the sense of explicit or implicit, ethical, juridical or legal rules that prescribe a specific action to materially or formally determined groups of people. Norms, therefore, always preexist action and their nature is binary; they are either met, or not. Their function as regulative principles is reinforced through sanctions.

Data-processing and statistics have a fundamentally constituting role in the production of normalcy. As Davis says, "there is probably no area of contemporary life in which some idea of a norm, mean or average has not been calculated" ("Constructing Normalcy" 3). Surely most cultures develop certain kinds of daily routines but it is only *those* "everydays" which,

> are data-processed [that] are entirely new emergences: through them, we adapt ourselves to the average speeds of massive traffic flows; we respect critical values or not; we work according to normal workdays in normal working relationships or, when we are unemployed, we live with the help of unemployment insurance, which is calculated on the basis of mathematical statistics, etc.; we attempt to adjust our weight (i.e., our 'figure') according to data like 'normal' and 'ideal' weight; and, even when we get divorced or plan a late first birth, we also orient ourselves (at least sub-dominantly) to the relevant statistical curve-landscape (Link, "Crisis between 'Denormalization' and the 'New Normal'" 9).

The second inequation cautions against confusing individual normalities with everydayness or everyday life. Normality presumes statistical dispositifs and is defined in relation to averages and other statistical sizes in the strongest sense. Therefore, normality (as much as normalcy) can only be found in data-processing societies or, "cultures that continuously, routinely, comprehensively, and institutionally make themselves statistically transparent" ("Crisis between 'Denormalization' and the 'New Normal'" 8). This means that normality, in contrast to normativity, is essentially post-existent to action. The normal is thus established only retrospectively through its positioning on the concretely empirical statistical distribution curve. In this sense, normality (and by extension normalcy) is not an ahistorical, pan-chronological concept like "everydayness," which is historically all-encompassing, and affects all ages and cultures.

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year after the Lehman crash: 'We are beginning to *return to normalcy*. But normalcy cannot lead to complacency … History cannot be allowed to repeat itself'" ("Crisis between 'Denormalization' and the 'New Normal'" 7, emphasis added).

[12] Link, furthermore, inequates *Normalität* with 'bio-homeostasis,' 'cybernetics and technocracy,' 'aesthetic banality,' 'constructed social reality' (*Versuch* 33-40).

Before the concept of the norm entered Western culture and developed into a measuring stick for the individual calibration of physical and psychological traits ranking from below-average to above-average, frames of reference were significantly different. Davis demonstrates how the notion of the "ideal body" preceded the idea of the "normal body." For example, in the seventeenth century the ideal body, "as exemplified in the tradition of nude Venuses" was understood as a "myopoetic body that is linked to that of the gods" ("Constructing Normalcy" 4). Furthermore, "when ideal human bodies occur, they do so in mythology," not in reality (4). Davis argues that the central point here, "is that in a culture with an ideal form of the body, all members of the population are below the ideal … There is in such societies no demand that populations have bodies that conform to the ideal" (4). The crucial difference to contemporary conceptions, then, lies in the consequence that the ideal body cannot, by definition, be attained by humans.

Among key figures in the establishment of an achievable "normal body" in the late eighteenth and early nineteenth century was the Belgian astronomer, mathematician, and statistician Adolphe Quetelet (1796-1874).[13] Quetelet collected and analyzed data associated with incidents of crime and homicide, but also marriage. He devised improvements in census taking, and developed methods for simultaneous observations of astronomical, meteorological, and geodetic phenomena from scattered points throughout Europe. Quetelet's prominence, however, rests on his application of statistics and probability theory to social phenomena. Both methods were common in astronomy in accounting for measurement errors around means. Quetelet was the first to attempt to describe and explain the complexity of social phenomena by means of data collection and statistical methods of analysis. Not only did Quetelet believe there were calculable statistical laws underlying social phenomena, but that in the mathematical assessment of humankind psychological and moral characteristics could be measured in the same way as physical characteristics. Correspondingly, he referred to his project as "social physics." In *Sur l'homme et le développement de ses facultés, ou essai de physique sociale* (1835; *A Treatise on Man and the Development of His Faculties*), Quetelet drafts the concept of the calculable *l'homme moyen*, or the "average man" by means of the normal distribution. Average, here, comprises both physical and moral characteristics. This statistically calculable "average man" was propagated as the ideal version of man. In Quetelet's eugenicist view, "deviations more or less great from the mean have constituted [for artists] ugliness in body as well as vice in morals and a state of sickness with regard to the constitution (qtd. Porter 102). Davis sees in Quetelet's work a "scientific justification for moderation and middle-class ideology," and observes that "[t]he average man, the body of the man in the middle, becomes the exemplar of the middle way of life" (5). Carrying socially valued characteristics, *l'homme moyen* becomes an aspirational concept. In this way Quetelet's analysis becomes ideological. It moves from description (normal) to prescription (normative). A remnant from Quetelet's reflections, the body-mass-index (BMI) measurement is still commonly used in medical diagnostics.

[13] For a more detailed discussion of Quetelet's work, see Donnelly, Kevin, *Adolphe Quetelet, social physics and the average men of science: 1796-1874*, (2015); Gamper, Michael, "Emergenz des Mittelmäßigen: Cousin, Quetelet, Tocqueville und der literarische Realismus" (2007); Beirne, Piers, "Adolphe Quetelet and the Origins of Positivist Criminology" (1987).

EUGENICS

As a consequence of the establishment and pervasiveness of norms, the movement of eugenics gained momentum during the late nineteenth and early twentieth centuries. As Davis observes, "[t]he rather amazing fact is that almost all the early statisticians had one thing in common: they were eugenicists" ("Constructing Normalcy" 6). The reason statistics is bound up with eugenics is because the core tenet of statistics is that a population can be normed. In the wake of this central insight, Davis states that the norm divides the population into standard and nonstandard, normal and deviant subpopulations (6). Key figures in the eugenicist movement, such as Sir Francis Galton (1822–1911), Karl Pearson (1857-1936), and Sir Ronald Aylmer Fisher (1890-1962), worked on figuring out the statistical measure of humans in hopes of improving humans and diminishing deviations from the norm. In this way, eugenics as a scientific discipline and practice aims to norm the nonstandard.

It was Sir Francis Galton, a cousin to Charles Darwin (1809-1882), who coined the term "eugenics" in *Inquiries into the Human Faculty and its Development* (1883). Eugenics was, "the science of human improvement by better breeding" (Davenport 3). Galton engaged himself in the ways human traits can be inherited. This preoccupation led him to invent the method of fingerprinting in order to systematically identify and register those individuals carrying deviant features. These aims were not considered forms of criminalization at the time, but instead as procedures in service of national fitness. In Galton's pursuit of a progressive improvement of the human race, the individual body became the object of scrutiny and the reproductive rights of those identified with undesirable traits were questioned. In this way the Darwinian theory of evolution took hold of applied biology, and reinforced the idea that "defectives" were to be eliminated from the human race. In their objective to understand and eradicate social problems, professionals from disciplines such as medicine, psychology, and statistics targeted those classes of people they considered responsible for the so-called "feebleminded"[14]. It was widely believed that "feeblemindedness" was "one of the root causes of crime, pauperism, dependency, alcoholism, prostitution, and other social ills" (Elks 76).[15]

"Feebleminded" was considered a clinical term in the United States at the turn of the twentieth century and was later differentiated into the terms "mental deficiency," "mental retardation," "intellectual disabilities," and "developmental disabilities." Since it was believed that the major cause for feeblemindedness resided in the body, its diagnosis required an examination of hereditary status or cases of inbreeding, and disease.[16] The only way society as a whole could be spared from degeneration, eugenicists thought, was through controlling who was allowed to

[14] I use the term here as it was used at the time.

[15] See the work of Henry Goddard, psychologist and leading eugenicist, who advanced this thinking with publications, such as *Feeblemindedness: Its Causes and Consequences* (1914). Another Eugenicists who believed it was possible to classify individuals visually by learning to recognize what they believed to be observable characteristics of idiocy and imbecility was physician Martin Barr who developed a visual classification scheme (1904), which he perfected with Earle Francis Maloney as *Types of Mental Defectives* (1920).

[16] For more information see David J. Smith's *Minds Made Feeble: The Myth and Legacy of the Kallikaks* (1988); Saran Ghatak's "Goddard, Henry H.: Feeblemindedness and Delinquency" (2010); Alison C. Carey's "Beyond the Medical Model: A Reconsideration of 'Feeblemindedness,' Citizenship, and Eugenic Relations" (2003); or Joseph Jastak's "A Rigorous Criterion of Feeblemindedness" (1949).

breed.[17] The strategies of control were diverse. Strategies reached from regulations concerning the marriage of "undesirables" and strict immigration laws, to forced confinement in institutions and euthanasia.[18] By 1914 eugenics was a fully recognized science, taught at universities, promoted by associations (e.g. American Breeder's Association or Race Betterment Foundation), represented at state fairs, and accepted by the public. For example, state fairs held competitions "where families would be examined and trophies given to the 'fittest families' in order to promote positive eugenics" (Elks 76). Theories of degeneracy, genetic inheritance, and intellectual disability promoted the idea that a person's physical features, the shape of their body, their facial appearance, and expressions revealed basic information about their character, mental abilities and morale. Photography was one of eugenicists' most effective weapon in their crusade. As a diagnostic tool, photographs buttressed classification systems and provided "empirical proof" of the link between material bodies and mental deficiencies. In other words, the emergence of a new technology paradigmatically changed methods of conceptualizing the human body.

In this context, the work of Italian criminal anthropologist and eugenic phrenologist Cesare Lombroso (1835-1909) stands out. Lombroso's theories of the "born criminal" included an analysis of "bodily indicators" or, an enumeration of bodily features indicating a criminal disposition or mind. Clinical photography served a clear purpose; subjects were depicted as specimen, as examples of types of mental defectives, or carriers of particular disease or condition. Photographs made it possible and easy to grasp visually what was considered a mental defect that would otherwise be invisible. There has been extensive academic work[19] on the technological and representational strategies applied in clinical photography and its part in the construction of disability. These strategies may include: the use of measurements or a 'helping hand' in the picture, the juxtaposition of extremes in a single shot, the depiction of single shots of brains, before and after photographs, the singling out of particular body parts, or showcasing syndromes such as "mongolism" and "cretinism." The latter were considered genetic throwbacks to "inferior races," and called for genetic-control policies and classificatory systems in order to decide who should be institutionalized or sterilized. These photographs clearly depicted which characteristics were socially valued and which were not (e.g. dependency vs. independency).

Galton's work contributed significantly to statistics in that he initiated the substitution of the concept of averaging with the idea of ranking. Thus, physical and psychological traits, like weight or intelligence, were thought of in ranked order. One direct result of Galton's work is the Intelligence Quotient (IQ) and scholastic intelligence tests.[20] In other words, Galton redefined the concept of the "ideal" once more. Galton's work argues that the ideal body is achievable. Instead of being average, the ideal body is the perfect combination of the physical and psychological traits ranked best. Davis summarizes this development as follows,

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[17] See Stefan Kühl's *For the Betterment of the Race: The Rise and Fall of the International Movement for Eugenics and Racial Hygiene* (2015).

[18] See Rebecca M. Kluchin's "Social Engineering in the United States: Eugenics and Euthanasis" (2006); Gerald Vincent O'Brien's "Protecting the Social Body" (1999).

[19] See Sander Gilman's *Seeing the Insane* (1982); David Green's "Veins of Resemblance: Photography and Eugenics" (1984); Elizabeth Stephens and Peter Cryle's "Eugenics and the Normal Body" (2017); Anne Maxwell's *Picture Imperfect: Photography and Eugenics, 1870–1940* (2010).

[20] For the historical consequences of the implementation of the intelligence quotient and intelligence testing for non-Americans in the U.S. American context see Chapter 2.1 of this thesis.

> First, the application of the idea of a norm to the human body creates the idea of deviance or a 'deviant' body. Second, the idea of a norm pushes the normal variation of the body through a stricter template guiding the way the body 'should' be. Third, the revision of the 'normal curve of distribution' into quartiles, ranked in order, and so on, creates a new kind of 'ideal.' This statistical ideal is unlike the classical ideal which contains no imperative to be ideal. The new ideal of ranked order is powered by the imperative of the norm, and then is supplemented by the notion of progress, human perfectibility, and the elimination of deviance, to create a dominating hegemonic vision of what the human body should be ("Constructing Normalcy" 8).

In the aftermath of Galton's changes to the normal distribution, people possessing allegedly undesirable traits of any kind were grouped together: criminals, the poor, and people with disabilities. Disability was conflated with depravity and the undifferentiated classes of defectives, undesirables, and unfit were created. [21] During the eugenic era and beyond, "the unfit" were considered the disease of the nation and a threat to the project of perfecting autonomous subjects, and of producing bodies rich in capacity. The consequences of this redefinition for people with disabilities are multifarious: conceptual (in rise of notions like 'feeblemindness' or 'pauperism'), material (in the disregard in public transportation schemes, or architectural designs), political (in the practiced institutionalization and sterilization), and legal (in the exclusion from the educational or voting system).

In his criticism of the eugenics era, Martin Elks discounts the scientific practices and inherent ideology almost too easily:

> The inappropriate and inaccurate use of photographs by eugenicists as scientific proof is obvious when one reviews the thousands of pictures used as illustrations in eugenics texts. Some assertions about the photographs are just plain absurd … The belief in the validity of photography in general and of this specific photograph led the viewer to see *in* the photograph the condition identified in the caption (92).

Moreover, Elks emphasizes that "[t]he 'objectivity' of clinical photographs was an illusion" and explains how through the new medium of photography, "eugenicists created an imaginary disease, feeblemindedness." (98) He continues, "[t]heir textbook and journal illustrations are better described … as rhetoric rather than science. Nevertheless, the belief in the truth of photographs helped to elevate eugenics to scientific social policy (98).

Today, eugenics is no longer considered a valid science[22] and disability rights activism has gradually succeeded in developing inclusive legal and political frameworks. One notable landmark in civil rights legislation is the United States Disabilities Act of 1990. As Garland-Thomson summarizes in *Extraordinary Bodies*, the Act,

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[21] For further reading see Marsha Saxton, "Disability Rights and Selective Abortion" (2006); or Irmo Marini and Danielle D. Fox "The History of Treatment Towards Persons with Disabilities in America" (2018).

[22] And yet there are active supporters of the eugenic movement as could be recently seen in the revelation of a secretly hosted eugenics conference at the University College London (Rawlinson and Adams).

> acknowledges that disability depends upon perception and subjective judgment rather than on objective bodily states. Essential but implicit to this definition is that both 'impairment' and 'limit' depend on comparing individual bodies with unstated but determining norms, a hypothetical set of guidelines for corporeal form und function arising from cultural expectations about how human being should look and act. Although these expectations are partly founded on physiological facts about typical humans—such as having two legs with which to walk upright or having some capacity for sight or speech—their sociopolitical meanings and consequences are entirely culturally determined (6-7).

And yet, ramifications from the eugenic era still subliminally pervade modern Western societies.

In their latest publication *The Biopolitics of Disability,* Mitchell and Snyder focus on the question of what consequences the shift from a liberal to a neoliberal system entails for the disabled body. Mitchell and Snyder argue, it is a "shift from fetishizations of full capacity to fetishizations of minor, yet prolific incapacitations" (41). Mitchell and Snyder observe, "a turning point in the social management of disabled people from eugenic exclusionist practices to neoliberal inclusionist approaches" as a shift that comes with the drawback that disability is increasingly turned into a business model (41). Furthermore, they contend "[d]isability turns out to provide a key way of documenting the shift from production (Fordist) to consumption (post-Fordist) end of capitalism's perpetual historical renewal process intended to justify its founding inequalities and wealth disparities" (41). The status of the body in Western political systems is understood as overall unfavorable. In neoliberal biopolitics, all bodies are referenced as deficient and "in need of product supplementations to treat the in-built inferiority within" (39-40). The neoliberal gaze subdivides the body into individual insufficiencies, ailments, and shortcomings all in need of chemical, surgical or rehabilitative interventions. Mitchell and Snyder explain that,

> The historical shift from liberalism's carceral restraints on deviant bodies to neoliberalism's referencing of deficiencies across all bodies provides a key transition in historically distinct approaches to body management. Whereas liberalism recognized some bodies as normatively capacitated for a competitive labor market and other bodies as nonproductive due to their incapacitation (their defining, in-built impairment effects), neoliberalism tends to produce all bodies as languishing through excessive exposure to toxic environments in order to exploit new treatment markets (40).

Incapacitated bodies are now increasingly understood as normal. At the same time these individual incapacities drive the desire for perfection as well as the healthcare economy.[23] Mitchell and Snyder explicate:

> Under neoliberalism the body is targeted as inherently lacking, and the pharmaceutical and medical industries promise not to remove but mask social symptoms as individualized adjustments to states of a universally beleaguered embodiment. Nowhere in this marketing scheme is there a direct address of

[23] See also Puar's notion of the "economics of debility" (149).

> the toxic environments, workplaces, or oppressive living arrangements as the appropriate objects of critique or suspect sources of bodily debility. This loss of the exploitation of environments as causal agents brings full circle a shift in emphasis from the early eugenics period that identified urbanity as the origins of modern maladjustment and 'pastoral cure' (removal to rural institutions to reestablish one's connection with nature for the rejuvenation of ailing spirits) as the appropriate intervention (40).

Similarly, Judy Segal negotiates "the economic causes and effects of the notion that the body is the possession of a consumer who is able to purchase 'repairs' for it" (122). Related criticism has been voiced from within and without disability studies.[24] According to Segal's study on the rhetoric of medicine, the idea of the "healthy consumer" derives from the dominant metaphor of "medicine is a business." Segal explains that, "[a]lthough the business metaphor is not derived from biomedicine per se, it is sponsored by the biomedical model. That is, a positivist medical model, focusing on the delivery of quantifiable units of care, ideally with observable and measurable effects, is easily mapped onto the discursive realm of economics" (124).

2.1.2 The Medical Model of Disability

The production of "the normal" is mutually dependent on the production of its conceptual Others: the deviant, the abnormal, or the disabled. In particular, the modern medical discourse of the late eighteenth and early nineteenth centuries gave rise to a bio-medical model of disability[25] that determined, until the 1960s, what human bodies and minds could or could not do. The medical approach to disability follows several principles. First and foremost, the medical approach targets the individual body, and the body's examination is based on a comparison to a normative concept of the human body reminiscent of the Vitruvian Man as found in charts, tables, diagrams, and textbooks. Fundamentally deficit-oriented, the medical model determines physiologic and physiognomic deviances, maladies, and insufficiencies aiming for rehabilitation and restitution.[26]

In this context, the diagnostic act plays a significant role. As Segal declares, we "crave," and "fetishize" diagnoses, and sometimes we "desire the diagnosis even more than the relief from symptoms" (116). Monitoring devices and diagnostic apps[27] have entered our everyday lives, and their power resides in a belief in standard values. The crucial aspect of diagnosis lies in its narrative quality. A diagnosis tells a linear story of progression and betterment. Moreover, a diagnosis carries the power to establish hope for recovery and a return to normalcy. Valued as truth, diagnosis becomes an important factor in deciding the future development and progression of

[24] See, for instance, Chapter One of Davis' *Bending Over Backwards* (2002) or Ivan Illich's beginning to *Medical Nemesis* (1976).
[25] See Mike Bury's "Illness Narratives: Fact or Fiction?" (2001).
[26] See Annette Gough's "Body/Mine: A Chaos Narrative of Cyborg Subjectivities and Liminal Experiences" (2005).
[27] The market for health and fitness apps is expanding so massively that from 2014-2016 the usage of such apps "grew by over 330%" (Kesiraju par.1). Advertised to track one's health and fitness, apps monitor one's diet, weight, BMI, body fat, lean body mass and step count.

health conditions.[28] The reduction of impairment and restoration of all functions to the body is fulfilled through the use of prostheses, ortheses,[29] or muscular exercises. These technologies are meant to bring the disabled body (back) in line with the model of the able-bodied. Traditional rehabilitative practices follow and perpetuate a linear narrative of restoration and healing, which according to Pamela Fisher and Dan Goodley "can obstruct the development of positive discourses around disability" (78). Normalization does not only bear on the (re-)acquisition of ordinary capacities and normal bodily functions, but also on the restoration of an average visual appearance. According to this logic, it is not enough to move or get about by whatever means necessary but rather it is unequivocally preferable to walk on two legs. Disability studies scholars have criticized the enforcement of a strong alignment with functional and aesthetic norms its overarching and yet narrow normalizing authority over what is considered an acceptable body.[30]

To show that this understanding of the human body has a distinctive history, and therefore, agenda and ideology, disability studies scholars refer to this medical approach as "the medical model of disability." This choice in terminology intends to historicize, criticize, and denaturalize the medical approach to disability, and classify it as a corollary of a modern belief in science. Substantial disability scholarship has focused on "the historical formation of the social identity 'disabled,' presenting it as a way of organizing physical, mental and emotional variations into a large and diverse group of people who may have no more in common than the stigmatized designation of abnormality." (Garland-Thomson and Stoddard-Holmes 74)

In contrast, sparked by the activism of the disability rights movement in the 1960s, the academic negotiation of disability developed their own theories and a new vocabulary of disability consolidated under the header of "the social model of disability." [31] In opposition to the medical model, this new critical framework defined "disability not as a physical defect inherent in bodies—just as gender is not simply a matter of genitals nor race a matter of skin pigmentation—but rather as a way of interpreting human differences" (73). Within the social model, "disability becomes a representational system more than a medical problem, a social construction rather than a personal misfortune or a bodily flaw, and a subject appropriate for wide-ranging intellectual inquiry instead of a specialized field within medicine, rehabilitation or social work." (73) The social model offers a new perspective on disability by addressing abnormality, deviance, and the disabled body in historical terms while problematizing mechanisms of social construction and modes of cultural representation. Thus, this approach shifts the responsibility for accommodating disabilities from the individual to the society.

[28] See Goodley and Claire Tregaskis. "Storying Disability and Impairment: Retrospective Accounts of Disabled Family Life" (2006).

[29] In contrast to prostheses substitutive function, ortheses support structural and functional characteristics of the muscular and skeletal system externally.

[30] See Fisher and Goodley's "The linear medical model of disability: mothers of disabled babies resist with counter-narratives" (2007).

[31] For a detailed analysis of the British and American social model of disability see chapter 2.2 of this book.

2.1.3 Medical Romanticism

In the following I will show how literary traditions, particularly those of Romanticism grounded depictions of disability in the medical notions of disease, dysfunction, and disorder through visions of a grotesque body. Furthermore, when the Romantics' quest for cures were coupled with computer technologies two centuries later, the overcoming of the body's maladies appeared within reach.

Tracing the paradigmatic changes in Western conceptualization of the human body, I have so far treated medicine and literature as separate spheres, or in C. P. Snow's (1905-1980) coinage, as "two cultures." However, it is particularly the period of the late eighteenth and early nineteenth centuries, the Romantic era, that teems with cross-fertilizations between medical and literary discourses. "The romantic imperative," Friedrich Schlegel (1772-1829) declares, "demands the mixing of all genres." (KFSA 16: 134, no. 586, my translation) One of the main objectives of the Romantic Movement, which arose in Germany around the 1790s and subsequently spread to the U.K. and U.S., was bringing together different ways of knowledge production. The disciplinary boundaries between philosophy, art, poetry, and science were meant to become permeable in support of developing a new way of knowing about human life, art, and nature. Dedicated to the Romantic imperative, not only did authors such as Schlegel, Goethe (1749-1832) and Novalis (1772-1801)[32] identify with the ideal of the poet-philosopher-scientist but so did their Anglophone counterparts including: Samuel Taylor Coleridge (1772-1834), William Wordsworth (1770-1850), John Keats (1795-1821), and Thomas Beddoes (1803-1849).

As an artistic and intellectual movement, Romanticism shaped visual arts, music, literature as well as the natural sciences. At that time, one point of intersection[33] between literature and medicine was, for instance, the medium of the periodical press. In *Literature and Medicine in the Nineteenth Century Periodical Press* (2017), Megan Coyer assesses the ways in which "the Romantic periodical press cultivated innovative ideologies, discourses, and literary forms that both reflected and shaped medical culture in the nineteenth century" (1). While such interdisciplinary, or even transdisciplinary, approaches appear progressive from a contemporary point of view, some ideas remain fairly traditional. One such traditional idea is the conceptual understanding of health and disease. Martin Wallen shows that, "[t]he division into categories of heath and disease reveals the reliance of romantic discourses on the Socratic tradition that first makes the startlingly fundamental identification of health with life, order, and truth, disease with death, disorder and falsehood" (6). [34] The Romantics considered themselves the corrective to a misdirected, or sick, age. Again and again in the writings of the poet-philosopher-physicians, "we find the call for a restoration of health and expulsion of disease; and as consistently, health appears as a single standard of unity, while disease constitutes the multiple and obscure attacks" (Wallen 6). Wallen further emphasizes that, "[a]ll of a culture's values come into effect in setting the limits between health and disease," so that "[t]he categories of health and disease direct the valuations of all these other oppositions" whether they be binaries such as: organic and mechanic, nature and

[32] Together with Christian Friedrich Hölderlin (1770-1843), Friedrich Wilhelm Joseph Schelling (1775-1854), Georg Wilhelm Friedrich Hegel (1970-1831) they were referred to as the Jena romantics.
[33] Only recently have the Romantics been reevaluated with an explicit focus on disability. Michael Bradshaw's volume of collected essays, *Disabling Romanticism* (2016) aims to revisit Romantic "ideologies that support able-bodied and able-minded privilege" (1).
[34] See footnote nine of this book.

artifice, or imagination and reason (5). "To the Romantics," Wallen states, "this one division instigates all the others" (5). Nonetheless, there was still a small and loosely associated group of individuals to whom these oppositions did not hold.

2.1.4 Mechanical Romantics and Technoromanticism

In *The Romantic Machine* (2012), John Tresch discusses how a group of what he calls "mechanical romantics" put the division between the organic and the mechanical specifically under revision to arrive at the conclusion that science and technology are, instead of a dichotomy between human and nature, actually an integral part "in the creation of a 'second nature' " (4). Tresch elaborates,

> There was a shift in the image of the machine from an idea of balanced, inhuman clockwork to a 'romantic machine' exemplified by the steam engine and other technologies of conversion and transmutation. Concepts of mechanism and organism merged in several ways: mechanical processes were seen as the instruments of organic teleology; human technical innovations expressed nature's development; devices and machines fused with human actions, intentions, and perceptions. More broadly, a new concept of nature emerged, with the recognition that nature not only has a history but is subject to alteration by human technology (5).

Therefore, the mechanical romantics envisioned technology as a driver for their "re-imagining of the system of government, the distribution of the fruits of labor, and the proper relationship between humans and the earth" (3). According to Richard Coyne, in the twenty-first century this new world order the Romantics envisioned is accomplished through information (12). Rather than the "mechanical," Coyne speaks of the "technological" romanticism in his monograph *Technoromanticism: Digital Narrative, Holism, and the Romance of the Real* (1999). After an age of separation, fragmentation, and individuation, contemporary individuals form virtual communities, live artificial lives in virtual reality, and interact with artificial intelligences irrespective of their geographical location. In the information age, Coyne observes a return[35] of modern Western societies to the organizational state of the tribe. Coyne argues that the pattern of formation online is similar to how "conventional communities come into being but without depending on spatial proximity" (2). In his discussion, Coyne strongly relies on media theorist Marshall McLuhan, who stated in 1964 that the "current translation of our entire lives into to spiritual form of information" may "make of the entire globe, and of the human family, a single consciousness" (61). Technology provides the means for a long sought unity because:

> For the technoromantic, [the yearning] is for such a degree of absorption into technology that not only the body but technology is transcended. The electronic matrix is something greater than the contingencies of individual components, their physicality and their failings. We become one with each other and with our machines. (Coyne 67)

[35] Media theorist McLuhan describes the evolution from preliterate, tribal culture to literate, data processing culture as one from unity to individuation and multiplicity (1964).

Similarly, Douglas Rushkoff conceives the transcendence of the body in terms of human evolution and the progression of a species when he states, "[a]s computer programmers and psychedelic warriors together realize that 'all is one,' a common belief emerges that the evolution of humanity has been a willful progression toward the construction of the next dimensional home for consciousness" (*Cyberia* 16). Technology is understood to facilitate unification by means of the rejection of the material world. This logic of a digital utopia undergirded by rhetoric of progress found its way into literary narratives, which depict how the mind immerses in an electronic data stream. Coyne takes Gibson's *Neuromancer* as a prime example to illustrate how "[c]yberspace narratives are informed by the romantic (Gothic) fiction" (63).[36] Putting technology at the forefront of the interrogation of the human and their relationship to nature and culture characterizes William Gibson's technoromantic fiction. And yet, rather than simply discarding the body and abandoning the material world, Gibson's narratives problematize unitary concepts of immersion or definitive answers to the feud between software and hardware.

2.1.5 The Norm and the Novel

Literature, and narrative structures in general, have been considered central to the project of constructing the normal and the disabled body. Jürgen Link argues that as a cultural practice literature is "above all functional for subjectivation—that is, the production and reproduction of subjectivities" (15). The experience of the prescriptive quality of the normalistic curve-landscape motivates the individual to organize their life with regard to the limits of normality. The assuring normal middle zone is bracketed by risky transitional zones of those limits, followed by marginal zones of abnormality. Link points to an ambivalence that has been described in depth by disability studies scholars.[37] Link writes, "[t]he fear of denormalization establishes the average with an overwhelming power of attraction and the margins of abnormality with the power of repulsion" (15). And yet, Link observes that the margins are strangely attractive. That is, aesthetic abnormality appears to be more interesting than the ordinary, the average, and the normal. Link further argues that since there is no mathematical criterion for the precise limits of normality, these limits must be grounded symbolically. This is where the formative role of narratives comes in. The normalistic curve-landscape of statistical data is coded into collective symbols such as metaphors, synecdoches, *partes pro toto*, allegories, analogies, and the ubiquituous images of a culture (12). According to Link, the production of narratives is a central result of "the interplay between the normalistic curve-landscape and its coding by collective symbolism" (12). He declares that, "normalism is the overall interdiscursive frame for subjectivation both in the psychological and sociological dimension" (16). Narratives use normalistic curve-landscapes as the very basic underlying narrative and symbolic frame and psychology. Therefore, narratives cannot but be normalistic.

[36] In a similar spirit, Rapatzikou wrote extensively on this topic in *Gothic Motifs in the Fiction of William Gibson* (2004).

[37] For insightful analyses of the relation between disability and ambivalence see Garland-Thomson's *Freakery* (1996); Elizabeth Grosz's "Intolerable Ambiguity: Freaks as/at the Limits" (1996); Shildrick's "The Disabled Body, Genealogy and Undecidability" (2005).

Likewise, Davis asserts that "the novel as a form promotes and symbolically produces normative structures" ("Constructing Normalcy" 11). Furthermore "[i]f we accept that novels are a social practice that arose as part of the project of middle-class hegemony, then we can see that the plot and character development of novels tend to pull toward the normative" (11). It is not so much an author's conscious choice but instead "the very structures on which the novel rests [that] tend to be normative, ideologically emphasizing the universal quality of the central character whose normativity encourages us to identify with him or her" (11). In other words, the normalistic narrative structures symbolically buttress the normal body, repeatedly linking the normal with qualities such as healthy, virtuous, good, and desirable to consolidate this assertion of value. At the same time, more often then not literary works present figures like sacrificial victims or villains as physically abnormal. For example, these character-types are often represented as scarred, deformed, or mutilated. Attentive to the topic of disability, Davis observes that "almost any literary work will have some reference to the abnormal, to disability, and so on. [He] would explain this phenomenon as a result of the hegemony of normalcy. This normalcy must constantly be enforced in public venues" (12). Moreover, novels offer sometimes implicitly and other times explicitly, "a kind of surveying of the terrain of the body, an attention to difference—physical, mental, and national" (15). What could be called a "eugenic gaze" is however a mere "recapitulation of the novelistic gaze" that sees meaning in normal and deviant features (14). The basic features of the novelistic form are fundamentally normalistic because "from the typicality of the central character, to the normalizing devices of plot to bring deviant characters back into the norms of society, to the normalizing coda of endings, the nineteenth- and twentieth-century novel promulgates and disburses notions of normalcy and by extension makes of physical differences ideological differences" (15). The novel, therefore, ideologically consolidates the power of the bourgeoisie. Davis argues that in order to develop awareness for disability issues, literary works and narratives in general need "to reverse the hegemony of the normal and to institute alternative ways of thinking about the abnormal" (15). Operating within the interdiscourse, the novel translates and integrates ideas from specialized medical discourses as can be seen in examples of canonical literary works such as: William Faulkner's *The Sound and the Fury* (1929), John Steinbeck's *Of Mice and Men* (1937), Herman Melville's *Moby Dick* (1956), and Harper Lee's *To Kill a Mockingbird* (1960) as well as contemporary novels such as: Michelle Hodkin's *The Unbecoming of Mara Dyer* (2011), Jojo Moyes' *Me Before You* (2012), R. J. Palacio's *Wonder* (2012), John Green's *The Fault in Our Stars* (2012), and Anthony Doerr's *All the Light We Cannot See* (2014).[38]

An investigation of the "elementary discourse," in Link's sense, gives an indication of how the specialized discourse of medicine informs actual everyday lives with respect to disability. Fisher and Goodley examine biographical accounts of how parents, and particularly mothers, of disabled children make sense of and speak about

[38] For more examples and their analysis see Miles Beauchamp, Wendy Chung, and Alijandra Mogilner's *Disabled Literature: A Critical Examination of the Portrayal of Individuals with Disabilities in Selected Works of Modern and Contemporary American Literature* (2015); Alice Hall's *Disability and Modern Fiction: Faulkner, Morrison, Coetzee and the Nobel Prize for Literature* (2012); *Literature and Disability* (2015); Kathryn Allan's *Disability in Science Fiction: Representations of Technology and Cure* (2013); or Maren Linett's *Bodies of Modernism: Physical Disability in Transatlantic Modernist Literature* (2017).

disability. What the two scholars find striking is how strongly these life narratives[39] are structured along the principle of *linearity*. In "Linear Medical Model of Disability," Fisher and Goodley make the observation that, "[t]he linear life narrative constitutes a dominant trope within Western culture" and can be traced to the Enlightenment period of the late eighteenth century with its "modernist worldview and its belief in progress and science" (66, 70).[40] Fisher and Goodley argue that, "both Enlightenment thinking and modernist traditions promoted the view that history could be regarded in terms of cumulative, linear progression, achieved through the application of reason, and the exercise of science and of 'expert' knowledge" (66). Such "all-explaining" approaches to the body are "rarely adequate to account for the complexities of human conditions" (66, 70). Still today, we realize the repercussions of the modernist push towards individualism and progress in manifestations of, for instance, the promising linear betterment inherent in diagnoses. At this point, I extend Fisher's and Goodley's criticism to argue that given the novel's potential to mediate between discourses, the fundamental linearity of its form as well as the novel's rise during the eighteenth and nineteenth centuries, contributed to the ways in which we think, talk, and write about the body.

EXTRAORDINARY BODIES OF DISABLED FIGURES

While literature, like other forms of art, has always featured both normal and disabled figures, the latter's frequency of occurrence, attributed roles, modes of representation, ascribed values, and narrative purpose differ widely from their normal counterparts. Figures such as "the monster," "the cripple," or "the freak" have become iconic and integral to the artistic repertoire of narrative and representation.[41] As signifiers of evil, or personifications of debased morals, these set figures function as the prototypical villains.[42] Garland-Thomson observes, that "[d]isabled literary characters usually remain on the margins of fiction as uncomplicated figures or exotic aliens whose bodily configurations operate as spectacles, eliciting responses from other characters or producing rhetorical effects that depend on disability's cultural resonance. Indeed, main characters almost never have physical disabilities" (*Extraordinary Bodies* 9).

[39] Exemplifying the importance of life narratives for people with disabilities G. Thomas Couser states in *Signifying Bodies: Disability in Contemporary Life Writing* (2009): "To members of marginalized groups, autobiography may be the most accessible of literary genres. It requires less in the way of literary expertise and experience than more exalted genres, like action or drama; it seems to require only that one have a life—or at least, one considered worth narrating—and sufficient narrative skill to tell one's own story. Most literary scholars would agree that autobiography has served historically as a sort of threshold genre for marginalized populations; within the American literary tradition, witness the importance of autobiography to African Americans, Native Americans, and women, for example. Presumably, it might serve disabled people this way as well" (31). For a general introduction to life writing see Sidonie Smith, "Life Narrative: Definitions and Distinctions" (2002).

[40] For more information on linearity in relation to disability and medicine see David Coulby and Crispin Jones's "Post-modernity, Education and European Identities" (1996); Curt Dudley-Marling's "The Social Construction of Learning Disabilities" (2004); or Douglas Ezzy's "Illness Narrative: Time, Hope and HIV" (2000).

[41] The journals *Disability Studies Quarterly* and *Journal of Literary & Cultural Disability Studies* have specialized in the scholarly analysis of the medial representations as well as theoretical conceptualization of disability.

[42] Recent examples of physically or psychically marked villains may include figures from *Split* (2016) or *Wonder Woman* (2017). For a discussion of 'disability vilification' see Mark Weber, *Disability Harassment* (2007) or Marilyn Dahl "The Role of the Media in Promoting Images of Disability-Disability as Metaphor: The Evil Crip" (1993).

Representations therefore establish, reiterate, and substantiate the conjunction between a particular symbolic meaning and a particular body type. The disabled figure serves as "a repository for social anxieties about such troubling concerns as vulnerability, control, and identity" (6). Furthermore, it is in narratives that disability, or "the paradigm of what culture calls deviant," and its related insecurities regarding the human body become manageable (6). "Because these characters operate as embodiments of an unnamed, profound peril," Garland-Thomson writes, "the narrative resolution is almost always to contain that threat by killing or disempowering the disabled character. The logic that governs this cultural narrative, then, is that eliminating the anomaly neutralizes the danger" (36). Garland-Thomson further argues that showcasing corporeal otherness has a decisive function in American literature. The disabled figure is "as essential to the cultural project of American self-making as the varied throng of gendered, racial, ethnic, and sexual figures of otherness that support the privileged norm" (5) Like Davis and Link explain, "the normal" needs to be continuously reinforced in cultural practices and discourses of everyday life. "Invested with meanings that far outstrip their biological bases," Garland-Thomson continues, "figures such as the cripple, the quadroon, the queer, the outsider, the whore are taxonomical, ideological products marked by socially determined stigmata, defined through representations, and excluded from social power and status" (8). Understood as politicized constructions, these figures both corroborate with and mirror oppressive governmental structures and exclusive power relations on all levels.

There is, of course, a wide spectrum within the representation of corporeal Otherness that ranges from simplistic and formulaic, to complex and ambiguous figurations. One could argue that there exists a tradition of celebrating extraordinary bodies in cultural artifacts, which portray physical or psychic Otherness not as the signifiers of dysfunction or threat, but instead as an asset or a cause for admiration and fascination. The pathological case example of the "idiot-savant" is illustrative of how disability sometimes borders on genius or super-ability and has been taken up by popular literary works, such as Winston Groom's *Forrest Gump* (1986) and Jonathan Safran Foer's *Extremely Loud and Incredibly Close* (2005).[43]

From a socio-political perspective, these allegedly "positive" or empowering representations can be similarly damaging for people with disabilities. Whether characters are depicted as totally blind, profoundly deaf, never leaving the wheelchair or, on the contrary, as super-abled, and having "overcome" their disability, both literary strategies widen the gap between reality and representation. Representation is crucial in shaping perception and constituting cultural identities and categories, especially if audiences have had little direct knowledge or few real-life encounters with disability. Literary disability studies scholars have criticized disabled figures which flatten or misrepresent the actual experience of disability because traits or conditions are often singled-out and depicted as static attributes that overshadow all other personality traits. The dynamic and interrelated character of disability is often missing. Garland-Thomson stresses that what is generally understood as a homogenous group does not share more characteristics but rather shares an "experience of stigmatization…A blind person, an epileptic, a paraplegic, a deaf person, and an amputee, for example, have no shared cultural heritage, traditional activities, or common physical experience" (15). It is primarily their social status that

[43] For more details on cultural depictions of autism see Stuart Murray's *Representation Autism: Culture, Narrative, Fascination* (2008).

creates commonality. Mostly, representations lack in political awareness but feature disabled figures merely as "conventional elements of the sentimental, romantic, Gothic, or grotesque traditions" (10).

Manifesting as a facet of the Romantic movement, the grotesque provided a subversive aesthetic and gave rise to fantastically distorted and ugly figures that became more pronounced during the eighteenth century—an era distinguished by rationalism and neoclassicism. As a historical mode of art, the grotesque has travelled from the original denotation of paintings found on the walls of the grottoes—the cellars of Roman ruins—to architecture, theatre, and literature.[44] While "defenders of orthodoxy and keepers of catholic ideals of art" understood the grotto style as an "ideological threat" and "an assault on the orthodox standards of taste" leading critics such as Friedrich Schlegel, Samuel Taylor Coleridge and Victor Hugo conceived of it as an argent reaction to "an age sick with moral and political repression" (Burwick 92). Among the major tropes of the grotesque are hybridity and the distortion or transgression of boundaries. These tropes can be psychological or physical, as in the fusion of fantastical motifs of the human form with that of animals, plants, and machines. The mode of depiction is fantastical rather than realistic, laying somewhere between horror and comedy, the Gothic and the Satire. Burwick describes grotesque aesthetics as operating "through an alternation of attraction and repulsion. The attraction is tainted with the lurid, the exotic, the forbidden; the repulsion is motivated more by a discomfort in disorder than outright revulsion" (94). Burwick paraphrases Victor Hugo affirmation that, "[t]o show man as he is," namely a complex and muddled creature of body and soul, good and evil, beauty and beast, "art necessarily becomes grotesque" (Burwick 98) As paradoxical as it may seem, artists considered the grotesque body as the appropriate tool in investigating and comprehending the human body. Burwick also states that, "[a]s a recurrent theme in the Romantic grotesque, the psychodrama of sin and guilt is typically narrated as the compelling enchantment with which the demonic seductress captivates her prey" (97).

In relation to his work on the normal and the deviant body, Davis writes that, "as a visual form [the grotesque] was inversely related to the concept of the ideal and its corollary that all bodies are in some sense disabled" ("Constructing Normalcy" 4). In pre-industrial, and pre-statistical times, the hybrid, deformed, and disordered being the grotesque portrayed evoked attraction and discomfort (i.e. freak shows) but were not considered deviant in a sense of Quetelet or Galton. Rather, "the use of the grotesque had a life-affirming transgressive quality in its inversion of the political hierarchy" (4).[45] The grotesque, "permeated culture and signified common humanity, whereas the disabled body, a later concept, was formulated as by definition excluded from culture, society, the norm" (4). From the early nineteenth century onwards, and especially in light of the ramifications of World War I, the category of the grotesque body was increasingly understood through notions of deformity, disorder, and deviance. Here, the concept of the grotesque begins to shift considerably towards the idea of disability. Garland-Thomson sees another twist in this connection between the grotesque style and disability:

> When the interpretative framework of the grotesque's visual fantasies and extravagances is translated into the predominantly realistic conventions of

[44] For extensive criticism see Friedrich Schlegel, *Gespräch über die Poesie* (1800) or Mikhail Bakhtin, *Rebelais and His World* (1968).

[45] Here, Davis references Peter Stallybrass and Allon White, *The Politics of Transgression* (1987) and more generally the work of Mikhail Bakhtin.

> literary representation and criticism, the grotesque becomes equated with physically disabled characters. Therefore, using the grotesque as an analytical strategy invites both critics and readers to view representations of disability through an aesthetic rather than a political framework. Aestheticizing disability as the grotesque tends to preclude analysis of how those representations support or challenge the sociopolitical relations that make disability a form of cultural otherness (*Extraordinary Bodies* 111-112).

While the disabled figure and its extraordinary form have been the topic of numerous artistic analyses, disability studies scholars bring the sociopolitical implications of art to the fore. An analysis of extraordinary bodies, be they coded through disability or superability, "furthers our collective understanding of the complex processes by which all forms of corporeal diversity acquire the cultural meanings undergirding a hierarchy of bodily traits that determines the distribution of privilege, status, and power" (6)

In order to gain a critical distance to, and simultaneously trouble the notion of the normal, Garland-Thomson proposes *the normate* as a neologistic conceptual strategy that throws "the veiled subject position of cultural self" into sharp relief (8). She writes, "[i]f one attempts to define the normate position by peeling away all the marked traits within the social order at this historical moment, what emerges is a very narrowly defined profile that describes only a minority of actual people" (8).

Erving Goffman refers to the fact that there is "only one complete unblushing male in America" and that is a "young, married, white, urban, northern, heterosexual, Protestant father of college education, fully employed, of good complexion, weight and height, and a recent record in sports" (qtd. Garland-Thomson 32).[46] By taking the statistical approach to the normal subject position seriously, almost in a *reductio ad absurdum* fashion, the normate problematizes the figure of the American self by revealing its unmarked and sheltered position in the neutral space of normalcy and the mechanisms of its production.

Since the terms "abnormal" and "deviant" carry strong medical overtones and historically loaded value judgments, their usage in my thesis is limited to the purpose of critical reflection, and in an effort to avoid the tacit continuation of the hegemony of normalcy. In the following, I will instead draw from Garland-Thomson's notion of the "extraordinary" body—a conveniently vague term that primarily refers to the perceived differences (not statistically measured, medically assessed, and socially devalued deviances) between bodies. It is also a term that allows a fresh perspective on a topic that runs too often on purely medical rails.

[46] Garland-Thomson specifically refers to Goffmann, his *Stigma: Notes on the Management of Spoiled Identity* (128). Goffman published *Stigma* (1963) in the same year as Californian sociologist Howard Saul Becker's *Outsiders: Studies in the Sociology of Deviance* (1963), which is foundational for labeling theory. Becker refined a general theory of deviance by analyzing the occurrence of the devalued statuses of certain individuals and groups. In stating that "The deviant is one to whom that label has successfully been applied; deviant behavior is behavior that people so label" (9), Becker moves towards a social model of conceptualizing deviance. Deviance, Becker underscores, "is *not* a quality of the act the person commits, but rather a consequence of the application by others" (9).

2.2 The Body and Society

2.2.1 The Social Model of Disability

Until the 1970s, Western societies approached to disability primarily through medicine and biology—sciences that are dedicated to measuring, statistically assessing, categorizing, and normalizing the human body. In the 1960s and 1970s in North America and the United Kingdom, several civil rights movements[47] came into being. Amongst the many fractions to formulate political claims against discrimination and exclusion were people with disabilities. Contrary to the previous negotiations of disability that were based on statistical data, eugenicist rhetoric, and medical rubrics, these activists based their demands on their personal experience of disability in their daily lives and pointed to the structural dimension of social inequalities. Disability activists in the United States as well as the United Kingdom. began to publically criticize social barriers and challenge "the historical oppression and exclusion of disabled people" (Shakespeare, "The Social Model of Disability" 197). United in their rejection of the predominance of the "over-medicalized and individualist accounts of disability," the disability rights movement provided the initial spark for what was later formalized under the term "the social model of disability" by academics (197). The social model of disability became a counter project to the well-established medical model of disability. Rather than conceptualizing disability as the deficit of an individual, a condition in need of repair, therapy, or rehabilitation as done under the medical (individual) model of disability, the social model examines the individual's socially-engineered environment. This revolutionary shift in focus granted this model the denotation "the big idea" (Hasler 1993). The key tenet of the social model is the fundamental distinction between individual biological characteristics (impairment) and its social reality (disability). Paramount to this model is the notion of disability as "a position of exclusion defined in relation to the balance of power between people" (Winance, "Rethinking Disability" 101). In its strongest, most revolutionary version, this model calls for an overall reformation of the state. In this way, the social model is more than a rights-based approach[48]. While the latter uses an existing legal framework, the former champions the reformation of the political and legal system, the re-organization of society. "Indeed," Mark Priestley elucidates, "it is precisely in revealing why legal safeguards alone cannot produce sufficient conditions for disabled people's full participation and equality that social model analyses are so useful" (23). Out of the nine disability studies paradigms that David Pfeiffer identifies, the medical model and the social model became the two most prominent, and yet controversial, approaches to disability. Each model provides its own set of rules and has its own vocabulary. The social model of disability exists in different variations ranging from radical or "strong" (Shakespeare) to mild or "vague" (Finkelstein). In the following, I will focus on the most prominent U.K. and U.S. versions of the social model, the former usually understood as more radical.

In the U.K., it was disabled-led activist groups, such as the Liberation Network of People with Disabilities, and the Union of the Physically Impaired

[47] To name a few groups and movements: Gay Liberation Front and Gay Activist Alliance early 1970s in the US, African-American Civil Rights Movement, Black Power Movement, Black Panther Movement, Chicano Movement, American Indian Movement, and first-wave feminism.
[48] Mark Priestley identifies this approach as more common in the E.U. and U.S. than U.K. (2005).

Against Segregation (UPIAS) that fought against social exclusion, stigmatization, and marginalization. They claimed that it was not the people with disabilities who were in need of change but social policies, laws, and attitudes. Shakespeare explains, "[t]he aim of UPIAS was to replace segregated facilities with opportunities for people with impairments to participate fully in society, to live independently, to undertake productive work and to have full control over their own lives" ("The Social Model of Disability" 197). In working towards the collective goal of liberation,

> [t]heir strategy … included … developing connections with other disabled people and creating an inclusive disability community for mutual support; exploring social conditioning and positive self-awareness; the abolition of all segregation; seeking control over media representation; working out a just economic policy; encouraging the formation of groups of people with disabilities (198).

The Liberation Network of People with Disabilities argues in 1981 that, "[w]hile the basis of social divisions in society was economic, these divisions were sustained by psychological beliefs in inherent superiority or inferiority" (qtd. in Shakespeare, "The Social Model of Disability" 198). The historical evolution of such beliefs is presented in chapter 2.1. It is this "asymmetry between the positions of disabled and able-bodied people" that the "proponents of the social model make visible and denounce" (Winance, "Rethinking Disability" 101). Myriam Winance explains that this asymmetry originates in a "process of oppression by the latter of the former ([a] process of domination)" that forecloses same life opportunities (101).

The British social model, as the more specific and resolute model, builds upon a number of dichotomies. First, there is a fundamental distinction between disability and impairment. "Disability" is structural, public, and pointing to social exclusion while "impairment" can be described as individual, private, and pointing to physical limitation. From these opposed ontologies follows the opposition of the social model and the medical model. Moreover, according to the social model disabled people are by definition an oppressed group. Defining disability *as* social oppression legitimizes the call for human rights (rather than pity or charity) and the call for action against disabling institutions, policies, power relations that underpin societies. In this vein, "social model thinking mandates barrier removal, anti-discrimination legislation, independent living, and other responses to social oppression (Shakespeare, "The Social Model of Disability" 199). Developed for these purposes, the social model is much more a "practical tool" than "a theory, an idea or concept" (Oliver 30). According to Mike Oliver, the social model is a powerful instrument to demonstrate that the problems disabled people face results from social oppression, not from an individually deficient physique. Thus, this tool has been politically powerful in building a social movement for disabled people due to its simple, memorable, and effective political slogans. Such unification has had a significant psychological effect in that it has fostered the self-esteem of disabled people and helped build a positive sense of collective identity and change perception of disabled people at large (30). All in all, this approach has helped to relocate the problem of disability and moral responsibility and move discourse from that of the individual to that of the social barriers and attitudes that disable them. A shift that allowed people with disabilities to "feel anger and pride," as Shakespeare states, "[r]ather than … self-pity" ("The Social Model of Disability" 200). Such a shift empowered people with disabilities to organize and combine forces in the fight for equal citizenship.

The American social model differs from the British in that it is less strict regarding terminology and less radical regarding action. Unlike the British model's focus on social oppression, the American approach defines disability through a "minority-group approach." The minority group status requires civil rights protection, rather than calling for revolution. Moreover, Colin Barnes explains that,

> most American and Canadian accounts are impairment specific in that they limit their discussions to 'people with physical disabilities' or the body; 'disability' is both biological condition *and* a social construct, and the terms 'disabled people' and 'people with disabilities' are used interchangeably ("New or Not So New" 578).

When evaluating "ideas on the basis of their conformity to social model orthodoxy" as it has often been done within the disability studies discourse, the absence of a strong dualism has led to a certain discontent with the American version among scholars (Shakespeare and Watson 8).

AN OUTDATED RHETORIC?

Whereas the social model of disability has been effective for purposes of political activism in the past, its simplicity has become its fatal flaw. The reality of disability is so much more complex than what the social model covers, that by now it has "outlived its usefulness" and even "creates more problems than it solves" Shakespeare and Watson write in 2002 (9,10).[49] In the following, I will outline some of the social model's principal weaknesses.

Due to its stark focus on disability in terms of social oppression and exclusionary practices, the social model has been accused of neglecting the individual experience of impairment. Due to its outright rejection of medical approaches, the social model risks playing down the possibly problematic nature of impairment. Yet, "[e]xperientially, impairment is salient to many" (Shakespeare and Watson 11). Similarly, Liz Crow criticizes the failure of this approach to encompass the personal experience of pain and limitations (5). Furthermore, Simon Williams states that the "endorsement of disability solely as social oppression is really only an option, and an erroneous one at that, for those spared the ravages of chronic illness" (812). In reality, Shakespeare and Watson clarify, the "majority of disabled people do not have stable, congenital impairments" (14). Jenny Morris, Sally French, and Carol Thomas, all in their own ways consider alternatives to the strong social model and embrace a discussion of the effects of impairment. Moreover, Shakespeare and Watson say, "it is clear that different impairments impinge in different ways" opening the debate for open-ended differentiation (12). A discussion of impairment requires the consideration of numerous factors: the degree of visibility, the ways it affects appearance and/or functioning, whether it is congenital or not, changes in condition from static to episodic to degenerative, etcetera. All of these aspects have different implications for health and individual capacity, for self-identity and for eliciting different responses from the broader cultural and social milieu. In short, "[a]ll these

[49] Both authors used to be advocates but changed their perspective, along the lines that Bailey and Hall formulate: "It is perfectly possible that what is politically progressive and opens up discursive opportunities in the 1970s and 1980s can become a form of closure – and have repressive value – by the time it is installed as the dominant genre" (15)

differences have salient impacts at both the individual and psychological level, and the social and structural level" (12).

That said, the crude distinction between impairment and disability makes sense only on paper. Not only does it naturalize and reproduce biological deficiency as inherent and given but "[i]n practice, social and individual aspects are almost inextricable in the complexity of the lived experience of disability" ("The Social Model of Disability" 201). Impairment is "not a pre-social or pre-cultural biological substrate" (Thomas 124). But rather, "[i]n practice, it is the interaction of individual bodies and social environments which produces disability" ("The Social Model of Disability" 201). Thus, in 2002 Shakespeare and Watson argue that instead of regarding impairment and disability as dichotomous it is more adequate to consider them as "different places on a continuum" or "different aspects of a single experience" (24). A taboo within the strong social model, medical treatment within this moderate, reconciling approach can be critically reconsidered. Needless to say, Shakespeare and Watson's line of argumentation is far from a "cure at all cost" logic but argues that a universal rejection or complete dismissal of medical intervention presents "an equivalent error" (13). Their observation that "there is no reason why appropriate action on impairment … cannot co-exist with action to remove disabling environments and practices" is as much to the point as the conclusion that "[p]eople are disabled both by social barriers and by their bodies" (15). Social change thus necessitates action at a political as much as a psychological level, and a legal as much as an interpersonal level.

Apart from the logical circularity,[50] the question of ascription,[51] and the utopian goal,[52] there are more drawbacks of the social model as an academic account of disability. Winance bemoans that despite the fact that "the social model challenges the process of normalization as this process is implemented in the individual model, notably in rehabilitation practices, and in its operational mode," it forfeits to "challenge the normative ideal targeted by this process," namely the "autonomous subject" (Winance "Rethinking Disability" 101). Here, Winance points to a lack of conceptual/theoretical depth that in a similar way led Shakespeare to conclude that for research purposes, the social model of disability is "unhelpful in understanding the complex interplay of individual and environmental factors in the lives of disabled people" (202). Rather, Shakespeare states, "[m]ore sophisticated and complex approaches are needed" (203).

With their notion of a materialist ontology of embodiment, Shakespeare and Watson point to an alternative conceptualization of disability and more adequate approach to disability politics (10). The centerpiece to their notion of embodied ontology is the elimination of the qualitative differences between disabled people and non-disabled people because "everyone has limitations," "everyone is vulnerable," and in essence, "everyone is impaired" (27, 29). This bodes a fundamental and drastic change in the architecture of the social model approach.[53] Impairment that is not only

[50] Shakespeare criticizes that the social model assumes what it needs to prove, namely that disabled people are oppressed. In this case, a "circularity enters into disability research: it is logically impossible for a qualitative researcher to find disabled people who are not oppressed." ("The Social Model of Disability" 200).

[51] Shakespeare and Watson emphasize that it is not self-evident who the disabled subject is, not always clear when disability is used as a label ascribed from the outside and when it manifests a self-identification (25).

[52] Finkelstein illustrates how difficult it is to operationalize a barrier-free utopia (1981).

[53] This conceptual shift paves the way for the theoretical inclusion of Latour's actor-network theory, which is discussed in chapter 2.3 of this book.

through the inevitable experience of functional loss through aging, or accident, or genetics, but impairment as in, "frail, limited, vulnerable, mortal" (28). Importantly, Shakespeare and Watson note that while we are all impaired, according to their new approach, "we are not all oppressed on the basis of this impairment and illness" and so the claim for social change remains (28). Unlike the broad and programmatic statements made by UPIAS, Shakespeare and Watson differentiate more thoroughly. For instance, UPIAS' take on impairment is unambiguously negative stating that, "[d]isability is something imposed on top of our impairments, by the way we are unnecessarily isolated and excluded from full participation in society" (Shakespeare 198). Disability is portrayed as an additional burden to an already problematic, because impaired, existence. Moreover, the additive logic used by UPIAS is deemed simplistic and thus inadequate by current discourse. There have been other voices suggesting alternative ontologies of disability over the years. Allan Sutherland (1981) attacked "the whole concept of physical normality," arguing all along that disablement/impairment "*is the normal condition of humanity*" (18). Aaron Antonovsky (1979) emphasized that illness is the human condition and Sebastiano Timpanaro (1975) stressed the fragility and vulnerability of embodiment in his work.

In acknowledgement of the complexity of the lived experience of disability being "so variable, so contingent, so situated," sitting "at the intersection of biology and society and of agency and structure" it can "only be understood in specific socio-historical contexts" (Shakespeare and Watson 19, 15-16). Shakespeare and Watson formulate a demand to include all the dimensions of disability in its negotiation: bodily, psychological, cultural, and political. But they do not stop there. Because the strong social model of disability operates one-dimensionally considering disability-related inequalities only, it has been regarded unable to grasp the multi-dimensional reality of people occupying more than one subject position simultaneously. What this means is that social model perspectives have not proved very effective in reconciling the axes of race, class, and gender within or alongside disability (Morris 1991, Vernon 1996). With this in mind I will provide a discussion to the concept of intersectionality in the following sections. This broadened theoretical framework will provide the backdrop for my analysis of Gibson's Bridge trilogy.

2.2.2 Intersectionality

Beyond its origin in African-American feminist legal and social studies and its ensuing proliferation in socio-legal contexts, intersectionality has now become a widespread concept throughout the Humanities. It was first proposed by African-American lawyer Kimberle Crenshaw in the late 1980s as a heuristic term to reveal the drawbacks of single identity politics, to examine the dynamics of difference and sameness, and to fight interlocking systems of oppression and privilege.[54] More specifically, Crenshaw's work aims to make visible the social disadvantages arising from being both black and female in North America. It aims to expose the logic by which, "Black females are both too similar to Black men and white women to represent themselves and too different to represent either Blacks or women as a whole" (Cho et al. 790).[55] Thus, Black female narratives were rendered

[54] Anthias references the Combahee River Collective and bell hooks to clarify that the formulation of intersectionality has been driven by black feminist politics (5).
[55] See also Devon W. Carbado's "Colorblind Intersectionality" (2013).

unrecognizable and this social group suffers from, what Crenshaw calls "intersectional invisibility" (2000, n.pag.). In more general terms the question is how "some differences coalesce to create a more abject form of oppression (e.g. being poor, black, and disabled)" and some others "support both privilege/invisibility within the same oppressed community (e.g. being black, wealthy, and gay)" (Erevelles and Minear 129). Such negotiation draws attention to "the legal system's complicity with the foundational violence of slavery, genocide, and heteropatriarchy" (Spade 1031). The recognition of interlocking of identity categories and its consequences on "all aspects of human life" granted Crenshaw as well as her ally Patricia Hill Collins a pioneer status in the field of disability studies (Anderson and Hill Collins, xii). In its opposition to dominant regimes of knowledge and power relations, intersectionality found common ground with fields such as critical race studies, gender studies, and women's studies. As Belkhir and Barnett state, "[t]his new integrative race, gender, and class (rgc) paradigm and the research it spawned reshaped fields, subfields, pedagogical and curricular discussions across the disciplinary and interdisciplinary spectrum" (158).

However, the ways in which intersectionality has been implemented in academic fields varies. "Intersectionality" has been considered a buzzword, claimed a theory, used as a tool, regarded as a perspective, and fought for as a field. All these negotiations of its status, though, boil down to a question of methodology. The historical centrality of Black-American women and Black feminism has caused some "reservations about intersectionality's usefulness as an analytic tool in addressing other marginalized communities and other manifestations of social power" (Cho et. al. 788). Angela Harris espouses intersectionality as a "nuance theory" which Erevelles counters by arguing that, "[d]isability, like race, offers not just a 'nuance' to any analysis of difference" (Erevelles and Minear 128). The trouble with race, class, and gender is not simply "magnified" by disability but the latter is a structural category in its own right. In their "Toward a Field of Intersectionality Studies: Theory, Applications, and Praxis" (2017) article, Cho, Crenshaw and McCall advocate the implementation of intersectionality as a field called, "interdisciplinary studies." They argue that "the widening scope of intersectional scholarship and praxis has not only clarified intersectionality's capacities; it has also amplified its generative focus as an analytical tool to capture and engage contextual dynamics of power" (Cho et al. 788).

Race, class and gender—the big three—constitute the most powerful organizing principles of cultural ideology in the American and European zones, if not worldwide (Belkhir and Barnett 2001). Traditionally based on binary differentiations (female/male, white/non-white) and hierarchies (upper, middle or lower class) which include site-specific and time-specific allocation of value, identity categories buttressed systemic inequality, exclusionary practices, and the oppression of those classified as inferior. The majority of research on race relations, social class, and gender identity developed in almost complete isolation from one other until the early 1980s. Despite its usefulness for specialized (academic as well as non-academic) questions or policies, one-dimensional and strictly disciplinary knowledge production does not come without pitfalls. Single-axis scholarship has been accused of producing, as well as "relying on a static and singular notion of being or of identity" which is simultaneously expected to explain all of the other life experiences of the individual or the group—an expectation that is bound to fail (Pastrana 75). On the other hand, there is the danger of an endless enumeration of differences that increases the complexity of the analysis infinitely, and yet appears reductive due to the reliance on set categories (see McCall's anticategorical complexity). In this regard, Yuval-

Davis questions whether it is even possible to attend to all the possible social categories intersecting at any given time and whether some differences acquire greater prominence than others in specific contexts (see *Women, Race, and Class,* 1983). Similarly, Anthias signposts specificity in reminding scholars to keep in mind what differences matter, when, where and how, and warning against a mere, "'listing' of differences (often reduced to identities) that intersect and the impossibility of attending analytically to this plurality" (5-6).

Further criticism turns on the original trinity as being invocative of the researcher, rather than reality. As Dhamoon notes, "the privilege assigned to this trinity is not intrinsic to the study of categories but indicative of the choices researchers have made … in specific historical context" (5). Cho et al. observe how "[i]ntersectionality has travelled into spaces and discourses that are themselves constituted by power relations that are far from transparent," and thus urge scholars to reflect on their own subject positions and the structural relations that are dynamically constituted by the very forces being interrogated (789). Instead of suggesting a return to the belief in an objective external observer, Cho et al. demands a second-order analysis, and the recognition of the observer as an actor and their inclusion into the analysis. Belkhir and Barnett argue that "[r]ace, class, and gender are different but related systems of *inequality*, which indicates that they are not only sources of oppression but also of power" (171). They continue:

> This conflated relationship to power and oppression according to each of these dimensions—race, gender, and class—specifies that we all have responsibility in eliminating inequality because very few of us are either all-powerful or all-oppressed. Eliminating oppression entails recognizing the sites of our own power (171).

In spite of this diverse criticism, intersectionality is still regarded as the "most appropriate analytical intervention" (Erevelles and Minear 129). Moreover, to mediate multiple differences and an "important corrective to essentialising identity constructs" (Anthias 3). As is often the case with the dissemination of new terms though, methodology lags behind popularity. In this regard, McCall unabashedly states that, "there has been little discussion of *how* to study intersectionality" (1771). There have been several theoretical propositions for this problem.

In her work, Anthias suggests the explicit distinction of three different levels[56] of intersectional analysis or as she calls it, 'levels of abstraction.' The most abstract first level covers social ontologies, followed by social categories, and lastly concrete social relations. This thesis is interested in the translation processes between social categories and concrete social relations through the medium of literature, rather concentrating on any of these three levels of abstraction as such. By means of an analysis of Gibson's novels, I show how literary narratives rely on categories in their representation of characters and explore how literary figurations carry the potential to reinforce as well as undermine categories. In this way, literary narratives participate in both the construction of the category of disability, which has seen massive re-fashioning over last four decades as well as the perception of disability on the level of social interaction.

[56] Winker and Degele (2011) also raise the issue of levels and argue for an intersectionality approach which focuses on "interactions between inequality-creating social structures (i.e. of power relations), symbolic representations and identity constructions that are context-specific, topic-oriented and inextricably linked to social praxis" (54).

In Anthias' approach, social categories are seen as categories of discursive practice in the making of boundaries and hierarchies. She states, "[t]he social categories of gender, ethnicity, 'race' and class construct particular criteria by which people are ordered into the categories but the categorising of people should not be elided with particular population categories/groupings as they relate to social life" (7). While all of these categories have different historical and ontological bases, they all involve boundary-making and hierarchy-making processes (7). Unfortunately, Anthias does not provide any further discussion of what these ontological bases might be. Categories exist, Anthias stresses, "within spatial and temporal contexts and are emergent rather than given and unchangeable, located in the operations of power. Such a view refuses the idea of categories as fixed elements of the social landscape but not categories themselves" (8). They do not operate as stand-alone categories in the realm of the social. With an emphasis on the fact that there is no deterministic relationship between social categories and the concrete social groups and their actual relations, Anthias explicates that,

> categorisations, however salient, cannot be immediately translatable in terms of the concrete relations that people find themselves in. These are not outcomes only of the salience of these categorisations, but of their intersections and of their embeddedness within a complex array of social relations, located within different arenas of social life and within temporal and spatial contexts. (8)

Anthias makes the case for a clear distinction between category and social relation, whereas both are in their own ways outcomes of processes of production, neither is simply given. She states,

> [c]oncrete relations of hierarchy exist as outcomes of the operation of power, underpinned by social categories that naturalise, collectivise and essentialise social relations, and through the workings of processes of inferiorisation (stigma, disgust, devaluation, disrespect), exploitation (commodification of persons and deriving interest and benefit from the exercise of power over them as an extension of the Marxist term) and unequal resource allocation (entailing multiple forms of inequality of access and inequality of outcome). (10)

However, while categories can be "involved in a range of group-making and group-breaking processes," Anthias does not explicitly mention the reverse process in which specific social relations and concrete actions can lead to changes in social categories be it, for instance, through activism or non-typical representations (9).

McCall's contribution to the methodology of intersectionality primarily addresses the modalities of analytical categories. While her explications of categorical complexity are much needed, they are not ends in themselves. McCall's real concern pertains to the stance researchers take toward categories, because different approaches produce different kinds of knowledge when it comes to examining the complexity of intersectionality in social life. On the whole, McCall presents three types of approaches. Originating in Women's studies, the *anticategorical* approach to complexity regards social life as "too irreducibly complex—overflowing with multiple and fluid determinations of both subjects and structures—to make fixed categories anything but simplifying social fictions that produce inequalities in the process of producing differences" (1773). As a result of discontent with the simplicity

of analytical categories, scholars following the anticategorical approach reject categories altogether. Advocates of the *intracategorical* approach, on the other hand, do not believe social categories to be expendable but instead acknowledge them as necessary components of analysis. Intracategorical analyses target the complex relationships of inequality within a certain category and are, therefore, interested in the diversity and complexity of the lived experience within a social group.[57] While the anticategorical approach and the intracategorical approach compare in their interrogation of boundary-making and boundary-defining processes, this is not the primary objective of the latter. While the intracategorical approach maintains a critical stance, it still accepts social categories. McCall underscores that, the point is not to deny the importance—both material and discursive—of categories but to focus on the process by which they are produced, experienced, reproduced, and resisted in everyday life" (1783). After all, it was the spirit of the intracategorical approach that inaugurated the study of intersectionality. Scholars use qualitative methods to intensively study single groups, or "cases." Such sociological case studies are expected "to reveal diversity, variation, and heterogeneity where quantitative researchers see singularity, sameness, and homogeneity" (1782). This approach focuses on diversity and difference *within* a social group—diversity and difference that the respective social category glosses over. This is why the distinction between category and concrete social relationships is an important one; it undermines any deterministic notion that might arise. McCall says,

> Although broad racial, national, class, and gender structures of inequality have an impact and must be discussed, they do not determine the complex texture of day-to-day life for individual members of the social group under study, no matter how detailed the level of disaggregation (1782).

In order to interrogate and ultimately explicate the intersectional configurations of inequality between different social groups within and across analytical categories, the third approach—referred to as *intercategorical, categorical* (McCall) or *constitutive* (Yuval-Davis)—resorts to provisionally adopt and strategically use analytical categories. McCall argues, that "[i]f structural relationships are the focus of analysis, rather than the underlying assumption or context of the analysis, categorization is inevitable" (1786). While categories serve as "anchor" points they are by no means understood as static (Glenn 14). Scholars working in this vein are concerned "with the nature of the relationships among social groups and, importantly, how they are changing, rather than with the definition or representation of such groups per se" (1775). Similarly, Yuval-Davis is concerned with the real-life experience of women of color at the intersection of multiple social categories, which includes an interrogation of, "the structural conditions within which these social categories are constructed by, and intermeshed with each other in specific historical contexts" (Erevelles and Minear 131). Yuval-Davis explains:

> The point of intersectional analysis is not to find 'several identities under one' … This would reinscribe the fragmented, additive model of oppression and essentialize specific social identities. Instead the point is to analyse the differential ways by which social divisions are concretely enmeshed and constructed by each other and how they relate to political and subjective constructions of identities

[57] See also Bonnie T. Dill's "Work at the Intersections of Race, Gender, Ethnicity, and Other Dimensions of Difference in Higher Education" (2002).

(205).

Whatever the status of categories, all three approaches have in common a heightened sensitivity to history. Anthias, in particular, emphasizes that social divisions appear differently when considered as historical processes (diachronic) and historical outcomes (synchronic) (12). In order to understand racist practices and outcomes, it is not enough to look at race and racialization alone but one must also consider their co-dependency with other categories over time and in different contexts (juridical, sociological, medical and so on). In order to understand the complexity of lived experience, the analysis needs to consider all the relevant "[i]nflections for specific people in specific places and times within the arenas of organisation, representation, intersubjectivity and experience" (11). As has become clear, "intersections" do not denote specific (geographical) places but rather the processes of inflection, cross-classification and mutual construction of subject positions. Therefore, rather than merely adding disability to nuance an intersectional analysis, I will foreground the historical contexts and structural conditions within which the identity categories of race and disability intersect.

RACE, CLASS, GENDER, AND DISABILITY: AN UNCERTAIN LIASION

How does disability relate to the well-established triad of race, class and gender (RCG)? Owing to the increased popularity of intersectional perspectives in research, disability has surfaced as a structural category in subject formation in ever-new discourses. This has led to the recognition of disability as "constitutive of most social differences, particularly race" (Erevelles and Minear 133). With regard to Chicana/o history in the U.S., Molina writes,

> How health officials came to view and treat Mexicans was directly tied to these officials' assumptions about and experiences with Asian residents in Los Angeles. Indeed, from 1869 until 1920, the city health department used only two racial categories: Chinese and the rest of the population. 'Mexican' was a category constructed from what it was not: not white, not Chinese, not Japanese ("Chicana/o History through a Relational Lens" 528).

This passage illustrates how the construction of "Mexican" as a racial category took place within a medical discourse by way of consideration of other ethnic groups, and races at a certain point in time in Los Angeles—the same discipline that defined disability for centuries.

Rather than "intersectional," Molina categorizes her work as "relational." But, in effect, both approaches are geared towards a similar goal: the exploration of "how the racial constructions of various groups affect one another" (525). Her negotiations of the concrete social relations involved in racialization are cross-classified with disability, gender, nation, ethnicity, and class, where those categories factor in. Molina explains,

> By relational, I do not mean comparative. A comparative treatment of race compares and contrasts groups, treating them as independent of one another. It also can leave the construction of racial categories themselves unexamined,

> thereby, even if unintentionally, reifying them. A relational treatment of race recognizes that the construction of race is a mutually constitutive process and demonstrates how race is socially constructed, hence fighting against essentialist notions (522).

In her work, Molina sometimes draws on her own intersectional experience to describe individual instances of the interlocking and interference of identity categories. "Being from a working-class neighbourhood," she recounts childhood memory, "produced a kind of solidarity that cut across the color line" (521).

Given the relevance of disability in the intersectional discourse, debates are still on-going whether it is to be regarded as a discrete category alongside RCG, or as a subcategory, or whether the category itself should not be disability but rather "body." Nonetheless, having such discussions in the first place proves there has been progress since, for a long time, instead of building an alliance between RCG and disability, "CRT [critical race theory] scholars (like other radical scholars) have mistakenly conceived of disability as a biological category, as an immutable and pathological abnormality" derived from medical rubrics and diagnostic categories (Erevelles and Minear 132). Similarly, before critical race theory, race was considered a biological and natural category.

This book does not provide a sociological case study. There is no data set of interviewed individuals from particular social groups. Nor is this a purely philosophical negotiation of categorical definitions. Instead, the literary depiction of a disabled female Mexican is central to my analysis of Gibson's Bridge trilogy. For that matter, the historical relation between race and disability will be examined. Since specificity and historical sensitivity are of particular import to such intersectional approach, the following section is dedicated to a historical overview of the mutual construction of these categories and its consequences for the concrete social groups.

THE MAKING OF THE DISABLED MEXICAN

Following Ian F. Haney-Lopez's assertion that, "[b]iological race is an illusion" but social race is not, I will present some of the mechanisms in the social construction of "Mexican" as a race category and its entanglement with disability in that process (172). "Every few years," Molina observes, "the debate over whether race is a social construction or a biological reality is rekindled" ("Medicalizing the Mexican" 22). During the last few decades, discussions of race have seen a keen interest in discursive practices so much so that "important ways in which race is written (and continuously rewritten) on the body are sometimes overlooked" (23). Molina argues that race (and disability) are first identified as forms of non-normative embodiment, and then mobilized to exclude these particular groups from the body politic and the right of social membership. Similar to Garland-Thomson's notion of the *normate* in disability studies, Molina invokes the *modal subject* in Latina/o studies. Molina explains,

> [i]n the United States, the modal subject is neither raced nor disabled. Historically, race has provided a shorthand way to refer to difference, be it physical, cultural, or political, and thus also has been central in defining the modal subject (e.g. enfranchised/disenfranchised; citizen/alien, slave owner/slave). Likewise, the modal subject historically has been assumed to be

independent and, by extension, able-bodied as well ("Medicalizing the Mexican" 23).

A major drive in the process of racialization was immigration. When the U.S. sought a major infusion of labor for the expansion of railroad lines, construction of federally funded irrigation, and agricultural fieldwork, this led to a significant migration to the southern states from the Americas at the end of the nineteenth century and beginning of the twentieth century. It was particularly the "arrival of more than 200,000 Mexican immigrants in Los Angeles, San Bernardino, and Orange Counties between 1910 and 1930" that has become a prominent example of "a large-scale transnational migration that disrupted the institutional apparatus of the nation-state at the local level" (Torres-Rouff 99). Unprepared for the influx of Mexican workers and their families, local communities, schools, and lawmakers were challenged in their organization of society. Montejano describes the Mexican-American relationship of the late nineteenth century as "inconsistent and contradictory" and yet the emergence of a "race situation" was already evident—a situation "where ethnic or national prejudice" lay the foundation of later practices of separation and control (Montejano 82). The contradictory nature of the situation derived from the disparate attitudes, for instance, of the advocates and opponents of immigration held. For example, large-scale employers who were in need of workers supported immigration in order to increase the productivity of their business. Since most of the Mexican workers were low-skilled, companies had a "vested interest in the continued importation of Mexican labor" as it meant low wages (Molina, "Medicalizing the Mexican" 27).

At the same time, the endorsement of immigration relied on the argument that Mexicans were uniquely able-bodied, uniquely suited for physically demanding labor, and better able to do agricultural work due to their subordinate and docile nature. Molina explains that, "because immigrants were considered advantageous only to the extent they filled critical gaps in the labor market, physical fitness was central to gauging a groups's desirability" (24). Anti-immigrationists, on the other hand, claimed Mexicans were generally "unfit." Physical fitness became the battleground for advocates *and* opponents of immigration, and both used arguments based on corporeal attributes in order to construct Mexicans as desirable or undesirable. Molina states that, "[a]lthough Mexicans were not categorized as disabled, they were constructed as non-normative, and discourses that emphasized the body constituted a main vehicle for achieving this construction" (24). The notion of non-normative embodiment was a vital instrument in the construction of "the image of the undesirable immigrant" (24). "At the time," Molina specifies that, "health officials took the position that Mexicans contracted tuberculosis *after* they arrived in the United States" (27).[58] She goes on to say that, "[d]isease outbreaks legitimized the increased fortification of the border and stigmatized Mexicans as disease carriers. Still, the link between disease and race was not yet as all-encompassing as it would become after the passage of the 1924 Immigration Act" (28). It was after the passage of the 1924 Immigration Act that attitudes began to change and Mexicans' biological makeup entered the discussion of the body and health:

[58] Molina reveals an insightfully gendered approach to racialized health problems when she explains how health officials marked in particular "Mexican women as the source of health problems and, in so doing, helped male Mexican laborers escape further stigma" ("Medicalizing the Mexican" 26).

> With the cessation of the flow of southern and eastern European immigrants, brownness came to signify the most important new threat to the racial hegemony of white native-born Americans. To ensure that Mexicans would be included in quota-based immigration legislation, it was imperative to depict them as dangerous. Anti-immigrationists began promoting an image of the racially inferior and diseased Mexican. Medicalized nativism proved central to this effort. Biologically based negative representations intensified during the mid- to late twenties and served as a key justification for the deportation of Mexicans during the Depression (29).

The argument of Californian public health officials shifted from the idea of the contraction of diseases in the U.S., to that of an importation into the U.S. by Mexicans—a reinterpretation that produced dramatic effects. Moreover, the argument was grounded in biology and medicine thus propagating an image of the Mexican as *inherently* diseased, less able-bodied, and irresponsible, further extending the attributed inferiority from the body to that of morale. Molina elaborates, "Mexicans go from typically receiving fairly casual medical scrutiny … to being the objects of intense, negative assessment and then exclusion" (33). The racialized knowledge produced by health officials is crucial in so far as medical and public health standards came to be used "as a gauge with which to determine the deleterious effects of immigration" by lawmakers as well as eugenicists (31). The dramatic redefinition of "the Mexican" is thus grounded in the materiality of the body—a historical process, which reveals "the general principles of anti-immigration bias within political and medical discourses" (33). A twist that conveniently masked systemic inequalities for those in power.

Another locus where the link between race and non-normative embodiment is reinforced was in schools. Despite the fact that California state law classified Mexicans and Mexican-Americans as white, and only permitted school districts to segregate Asian and American-Indian children, by 1928 "segregation had become standard practice and Mexican schools had become commonplace" (Torres-Rouff 93). Rather than legal enforcement, Torres-Rouff states that is was "parents, teachers, school board members, and school administrators, working in a variety of independent local contexts, engineered the transition from integrated to segregated schools for Mexican and black American students" (94). Once in place, these segregated schools contributed majorly to the construction of "Mexican" as a race category instead of merely a national identifier. Torres-Rouff explains how "white parents and administrators not only achieved racial separation, but also effectively reserved the best teachers, best facilities, and majority of available funds for white students at white schools" which left Mexican schools with underqualified teachers, and substandard facilities as well as specialized curricula – a school policy that meant to create "a docile and obedient workforce" (101, 108). Under these circumstances, it was not surprising that when during the 1920s and 1930s "intelligence testing became increasingly important to the education community" Mexican and Mexican-American children yielded particularly low results (122). Since "neither the scientists conducting the tests nor others using the results to support future research recognized the obvious bias," the introduction of I.Q. testing in schools had severe and extensive consequences (127).

On the basis of I.Q. test results, the inferiority of Mexicans was established as "a biological 'truth'" (122). The naïve belief in the quantitative assessment of "Mexican and Mexican American schoolchildren's inherent mental capacities"

resulted in the classification of the subjects as "'feeble minded,' providing scientific evidence that the average Mexican child was, in the parlance of these psychologists 'retarded'" according to the applied metric (122, 123). In this way, "Mexican students' shortcomings … were presented as biological rather than cultural, permanent and heritable rather than malleable" (123). These scientific procedures consolidated the notion of "Mexican" as an inferior race was a fact. "Race making, or racialization," as Torres-Rouff explains it, "is the product of political, social, and economic projects designed to divide and differentiate groups in a community on the presumed basis of inherent and inheritable biological difference" (95). What is more, this process worked two ways. Not only did "southern California's Mexican schools serve … as active sites for the redefinition of "Mexican" as a biological racial category," but at the same time "they served as tools for centering white children as mentally 'normal'" (129). The interpretation of the data gained shows a striking and strategic negligence of the social inequalities found between the groups tested. Those who voiced concern regarding the testing methods and interpretation, pointing to social factors like poverty, bilingualism, a segregated educational system, and socio-economic discrimination, arguing that "low I.Q. scores of Mexican-American students had to be understood in the context of the children's environment" remained largely unheard at the time (Wollenberg 322).

These increasingly common racist attitudes gradually informed legislation. This development made it possible for people like Carpenter to argue that, "Mexican children suffered from low moral and ethical character" and "the Mexican population is a fundamentally weaker race than the white race" which can be seen in "the Mexican temperament, the high percentage of juvenile arrests among the Mexicans, and the nature of offenses committed" (Torres-Rouff 126). Or similarly, State School Superintendent Andrew J. Moulder warned that, any attempt "to force African, Chinese and Diggers into one school … must result in the ruin of the schools. The great mass of our citizens will not associate in terms of equality with these inferior races; nor will they consent that their children should do so" (qtd. Wollenberg 318). Grace Stanely argued during this time that, "the Mexican is a menace to the health and morals of the rest of the community" (qtd. Wollenberg 319). These commonplace beliefs perpetuated a fundamentally eugenic logic.

Against this backdrop, the legal case of Méndez v. Westminster (1947) became a milestone in the Mexican-American civil rights movement. The Méndez family filed a suit against the exclusion of their children from the school of their district. According to the school district superintendent, segregation was imperative because Mexican children did not have the "mental ability of the white children" and they had "lice, impetigo, [and] generally dirty hands, face, neck and ears" (*Méndez v. Westminster* 20). The Méndez family framed their argument as follows: "[a]ll petitioners are taxpayers of good moral habits, not suffering from disability, infectious disease, and are qualified to be admitted to the use of the schools and facilities, within their respective districts and systems" (*Westminster v. Méndez* 2).

Against this socio-political background they needed to dissociate from the categories that structured the common image of a Mexican in the forties, and emphasize their normal status as modal subjects. This self-representation as explicitly "not suffering from disability" is an attempt to disentangle the identity categories of race and disability, and obtain full acceptance as citizens and thus civil rights. When in February 1946, the judge decided that segregation "fosters antagonisms in the children and suggests inferiority among them where none exists" and their objection was allowed it bode a huge success for the civil rights movement (Wollenberg 326).

However, despite the success of the Méndez v. Westminster case, racialization and segregation have continued to shape American society. According to Wollenberg, "[s]tate-wide, more Mexican and Mexican-American children probably attended segregated schools in 1973 than did in 1947, *Mendez v. Westminster* notwithstanding" (330).

Today, the processes described above are classified under the term scientific racism. According to Juliet Hooker, scientific racism denotes "racial theories with the credence and backing of science that posited the innate and permanent inferiority of nonwhites" (6). In her recent publication *Theorizing Race in the Americas* (2017), she elucidates how during the 19th century the,

> dominant Western ideas about race shifted from the (relatively) short-term explanations of human difference based on climate and environment that dominated Enlightenment thought, to full-fledged scientific theories of race as heredity and fixed notions of biological racial inferiority and 'natural' racial hierarchy (6).

Hooker presents three principle strands of racist science. First, "the ascendance of scientific racism began with the emergence of the American school of ethnology in the 1840s and 1850s, which 'affirmed … that the races of mankind had been separately created as distinct and unequal species'" (7). Thus, "explanations for racial difference shifted from external factors, such as climate and geography, to permanent inherited characteristics" (7). The ethnographical-biological approach argues that, "separate climate zones [were] destined for habitation by different racial groups, and that racial mixing led to degeneration" (7). Secondly, during the second half of the nineteenth century, "radically deterministic theories of history" emerged "that purported to establish the superiority of Aryans or Anglo-Saxons" (7). The historical school "argued that race was the central factor in historical development, that Aryans and Anglo-Saxons had reached the most advanced level of civilization" (7). In this line of thought, non-white inferiority was established as a predetermined historical fact. Finally, social Darwinism "argued that different races exhibited different levels of aptitude, including the ability to survive and become dominant, and as a result some were destined to rule over others" (8). It is not surprising how these racist mindsets within science spawned a height in the eugenics movement at the end of the nineteenth and beginning of the twentieth century. Particularly in the decades prior to World War II, eugenics directly informed official state policy, such as the Immigration Act of 1924 or Virginia Racial Integrity Act 1924. Hooker states, "[e]ugenicists such as Madison Grant combined the racial determinism of the historical school with new notions of racial hygiene to argue for racial purity, racial segregation, bans on nonwhite immigration and reductions in the flow of Southern European immigrants" (10). Grant particularly "advocated for the separation and eventual removal (via sterilization) of undesirables, defectives, and inferior race types. Grant's ideas were influential on public policy in the United States" (10).

2.3 The Body and Actor-Networks

2.3.1 Actor-Network Theory and the Articulation of the Body

In this third chapter, I present how disability studies scholars negotiate the ways in which medical theory and practice produces the concept of disability by putting paramount emphasis on disciplinary, discursive, and linguistic factors. This developed into what in chapter 2.2 is presented as the social model of disability—an approach that in turn has been criticized for treating immaterial bodies. This chapter works towards an imbrication of these approaches with regard to the role of prostheses, the individual, and social forces. While prior approaches favor either one of these actors and work from within disciplinary boundaries—medicine, biology, and sociology—these approaches are bound to identify some actors but not others which partake in disability. This final chapter centers on a cross-disciplinary actor-network theory infused method that allows me to address and account for the relationships between a high quantity and diverse quality of actors, instead of the actors in and of themselves. Thus, Actor-network theory provides the methodology and terminology that allows for a consideration of the individual as much as the society, language as much as materiality, and practices as much as things side-by-side[59].

Actor-network theory (ANT), as developed by Bruno Latour, John Law and Michel Callon, is a methodology that specializes in the study of associations and has been recently taken up in discussions of disability by Mitchell and Snyder, and sociologists Myriam Winance, and Ingunn Moser. Originating in Latour, Law, and Callon's individual as well as collaborative work on the sociology of science and technology, ANT has spread across a number of disciplines. As the figurehead of ANT, Latour is known for his criticism of the scientific method as an objective instrument to experimentally reveal facts in *Laboratory Life* (1979) and *The Pasteurization of France* (1988). Latour also addresses modernism, postmodern and antimodernism in *We Have Never Been Modern* (1993). Lastly, in *Reassembling the Social* (2005), sociological methodology that takes "the Social" as a cause or given, Latour argues the Social needs to be regarded as an effect of operations the current sociological method is oblivions to. As a pronounced scholar of science and technology, Latour might appear an unlikely candidate to engage with in both a literary analysis and a discussion of disability. However, Latour's explicit occupation with the acquisition of embodiment in his essay, "How to Talk About the Body?" (2004), reveals that actor-network theory provides the terminology and methodology to examine the body on the basis of its interrelations.

More prominent than Latour's propositions on the production of the body, though, are his repeated references to literature. Some of the cornerstones of his work[60] are, in his own words, "best accessible through the joint inventions of literature and science" ("Powers of the Facsimile" 14). In this sense Latour suggests "scientifiction"[61] as a unifying expression for his interest in literature and science – a suggestion that is made in apparent unawareness of the original coinage of this term by writer Hugo Gernsback in 1929.[62] The evolution of Gernsback's "scientifiction" into the contemporary notion of science fiction and his enormous work as not only a

[59] See Harrasser's notion of parahumanism in chapter 4.1 of this study.
[60] Here, the reference is to "matters of concern."
[61] See Latour's *Aramis, or the Love of Technology* ix.
[62] See Roger Luckhurst's "Scientifiction" 4.

writer, but also an editor and publisher granted Gernsback the title "The Father of Science Fiction" by some critics[63]. This thesis focuses on the writer who revolutionized Gernsback's traditional science fiction genre and was therefore referred to as "the father of cyberpunk."

How we theorize the body, Latour insists, fundamentally depends on our definition of science ("How to Talk About the Body?" 224). In hinging the discussion of the body on the specific modalities of science, Latour shifts from an essentialist question of "what is the body" to an epistemological question of "how do we talk about it." Moreover, he ties the question of the body into his overarching critique of the history of science, scientific methodology, and the role of the scientist. It is the flagrant discrepancy between modernist fictions of laboratory life and the actual procedures of experimentation, between how we imagine facts are discovered and how they actually come into existence, that Latour makes the centerpiece of his academic work. An understanding of laboratories as completely sterile and well-organized sites hosting scientists who are wholly uninvolved and who function as external observers of natural phenomena, mere conductors of laboratory practices which are in themselves neutral, logical, coherent, and devoid of social or political leverage is what over the course of almost four decades Latour has put under revision. As Latour describes it in *Laboratory Life* (1979), the laboratory is a messy place, saturated with the social and the political, and while he refashions the view on scientific practices, he also strongly challenges the underlying understanding of science.

Latour presents a critique of the old Lockean empiricism that traces back to the period of early modern philosophy and modern science. It is the clear-cut distinction of primary and secondary qualities that carves the way for opposing notions of an objective reality that is "out-there" and a subjective experience that is "in-there." A scientific method that first establishes the subject-object dichotomy and problematizes the mind-body dualism in order to then work towards the reconciliation or the overcoming of these dichotomies is, according to Latour, "not a useful approach" ("How to Talk about the Body" 209). Empiricists took "facts" as the "most primitive, solid, incontrovertible, undisputable material" and thus chose facts as the building blocks of their scientific method (*Reassembling* 112). But "[h]ow could a fact", Latour asks, "be that solid if it is also fabricated?" (112). Fabricated, that is, through a particular metric system, specific instruments, deliberate experiments, and so on. Matters of fact, Latour argues, "are a poor *proxy* of experience and of experimentation and … a confusing bundle of polemics, of epistemology, of modernist politics that can in no way claim to represent what is requested by a realist attitude" ("Steam" 245).

Latour suggests removing the artificial boundary between natural and social so that non-human entities can appear in new, unexpected ways. For instance, the much varied and uncertain nature that geologists attribute to rocks finds a too limited and stripped-down representation in empiricist accounts.[64] On the contrary to these empiricist negotiations, Latour observes how "[e]verywhere, the empirical multiplicity of former 'natural' agencies overflows the narrow boundary of matters of fact" (*Reassembling* 111).[65] From this perspective, empiricism in its traditional form (a science built on facts, interested in essences, and formulating statements) fails to serve as an adequate framework to render experience. This inadequacy, however, is

[63] See Mark Richard Siegel's *Hugo Gernsback, Father of Modern Science Fiction* (1988).
[64] Here, Latour refers back to Hacking's chapter on rocks in *The Social Construction of What?* (1999).
[65] Latour's examples are rocks, steel, genes, and computers.

not countered by "moving *away* from material experience, for instance to the 'rich human subjectivity', but *closer* to the much variegated lives materials have to offer" (111-112). Hence, Latour's method suggests moving closer to where and looking closer at how agencies are made to express themselves.

A key characteristic of ANT is the removal of the subject-object dichotomy and the implicit duality between humans and non-humans that grants agency and power to the subject, leaving the object passive and inert. Such presuppositions prevent, by default, the ability to recognize how some non-human objects enable or mediate action and is therefore countered by an ontological leveling, also referred to as the principle of generalized symmetry.[66] Latour emphasizes that the *actor* in ANT,

> is a semiotic definition—an actant—, that is, something that acts or to which activity is granted by others. It implies *no* special motivation of *human individual* actors, nor of humans in general. An actant can literally be anything provided it is granted to be the source of an action ("On Actor-Network Theory" 373).[67]

The actor-network that emerges when tracing actors is not a "technical network in the engineer's sense" whereas it may be "one of the possible final and stabilized state[s] of an actor-network" (2). Instead, "the work, and the movement, and the flow, and the changes … should be stressed" as these are what constitutes the network of associations (*Reassembling* 143). In brief, ANT provides a material-semiotic method to describe formation processes, innovations, and the complexities of the sociotechnological world. In brief, ANT provides a material-semiotic method to describe formation processes, innovations, and the complexities of the sociotechnological world by employing the same analytical and descriptive framework when faced with a human, a thought, a feeling, a text, or a machine.

The centerpiece of Latour's new empiricism, sometimes referred to as second empiricism, is not "matters of fact" then but "matters of concern." Matters of concern are, "highly uncertain and loudly disputed," but "real, objective, atypical and, above all, interesting agencies" (*Reassembling* 114). Here, knowledge is gained exactly from competing propositions, shifting frames of reference, and the recalcitrance of human and non-human actors to established facts. Latour borrows this line of thought from William James' and Isabelle Stengers' work on Alfred North Whitehead, which has never been simply concerned with "matters of fact." This new empiricism, accordingly, constitutes a new realist style that is committed to constructivism in that it accounts for the practices, conventions, beliefs, instruments, and competing viewpoints involved in the process of scientific fabrication of what is considered knowledge. It does not hold supremacy over what is true and what is not, and thus differs significantly from the first empiricism in terms of "its science, its politics, its esthetics, its morality" (*Reassembling* 115).[68]

On the basis of such a modified understanding of science, Latour approaches the body through its ability to be affected, its sensitivity to the environment, its relational character, and by decisively not pinpointing any essence of the body. "[T]o

[66] See the work of Michel Callon (1986).
[67] While Latour intends to provide a clarification regarding the difference between "actor" and "actant" in "On Actor-Network Theory," he is inconsistent in their usage and tends to use them synonymously on the course of his publications. This book therefore stands by the "actor" throughout.
[68] As an example see Latour's analysis of French scientist Louis Pasteur in *The Pasteurization of France* (1988).

have a body," Latour states with reference to Vinciane Despret, and William James, "is to learn to be affected" ("How to Talk About the Body" 205). This translates into the interrelated processes of "being moved" and becoming increasingly sensitive to the actors that put one into motion. This foundational statement entails several implications. First, a body is always acquired. Making an example out of the perfume industry, namely the ability to discriminate increasingly subtle differences of chemical composites through the use of odor kits, Latour explicates how through specific training one acquires an organ (meaning sensory capacities) and by extension a body (207) Secondly, this acquisition takes place progressively. Refining one's sensitivity to the world is a step-by-step and open-ended enterprise that involves things in a crucial manner. "Before the sessions, odors rained on the pupils without making them act, without making them speak, without rendering them attentive, without arousing them in precise ways" but after training the olfactory capacities the odor kit cannot but be conceived as "part and parcel of what it is to have a body" (207). Implicit in this line of argumentation is Latour's criticism of subject/object-based models for "discounting all the extrasomatic resources ever invented that allow us to be affected by others in different ways" (225). Latour argues that such an approach allows him to, "*give back* to the body all the material impedimenta that make it sensitive to differences" (206, emphasis added). In this way, things are theorized as "coextensive" with the body. Finally, Latour explains that, "body parts are progressively acquired at the same time as 'world counter-parts' are being registered in a new way" (207). The interaction between the body and the world is thus a mutually sensitizing, or constitutive process—a growing discriminative capacity brings about an increasingly richer (or richly differentiated) world.

Latour calls this type of learning, or process of differentiation "articulation." The odor kit accordingly, "'articulates' pupils' perceptions" because it informs/shapes the differentiations pupils will be able to make (210). Following this logic, an undifferentiated sensorium is identified as inarticulate. In that case, different odors elicited the same behavior. In contrast to conceptualizations of the body as naturally given, Latour emphasizes that the logic underpinning "articulation" makes it possible to, "take on board the *artificial and material* components allowing one to progressively have a body (210). In addition, there is no end to articulation. Articulation provides ever more "propositions" defying the conventional true/false dichotomy inherent to "statements." "For articulated propositions," Latour explains, "such a query is totally irrelevant and slightly quaint since the more artificiality, the more *sensorium*, the more bodies, the more affections, the more realities will be registered … Reality and artificiality are synonyms, not antonyms" (213).[69] Moreover, articulation, "does not expect accounts to *converge* into one single version that will *close* the discussion" (211).

With regard to another of Latour's seemingly improvised formulations, namely that of being "moved" or "put into action," it can be said that these formulations' value for my discussion of the literary representation of extraordinary

[69] Latour further clarifies: "if I, an untutored nose, need the odor kit to become sensitive to contrast, chemists need their analytical instruments to render themselves sensitive to differences of one single displaced atom. They too acquire a body, a nose, an organ, through their laboratories this time, and also thanks to their conferences, their literature and all the paraphernalia that make up what could be called the collective body of science" (209). In this line of thought, the novel as much as the laboratory establishes an artificial set-up, or experiment, to examine the differences between bodies and in this way, the reader may similarly learn to be "*be affected by hitherto unregistrable differences through the mediation of an artificially created set-up*" (209). By means of a more articulate sensitivity the perception of real bodies may correspondingly change.

corporeality and subjectivity lies in precisely the vagueness of the term. The "most general, most banal" vocabulary is integral to Latour's approach—best devoid of historical markers whatsoever (*Reassembling* 29). His so-called "infralanguage" is meant to remain "strictly meaningless" in order to avoid a confusion of language and landscape, map and territory (30). In this way the notion of "being moved" allows incorporating all possible emotional and behavioral output. According to Latour,

> [t]here is nothing especially interesting, deep, profound, worthwhile in a subject 'by itself' … a subject only becomes interesting, deep, profound, worthwhile when it resonates with others, is effected, moved, put into motion by new entities whose differences are registered in new and unexpected ways ("How we Talk About the Body" 210).

It is the resonance and the interaction that makes the subject and the world, and that subsequently makes each worthwhile.

Latour's call for "biocounterpower" is reflected in his approach in that it provides an alternative to the bio-medical model which frames the body as a naturally given and discrete entity, constituted by a fixed set of properties that are enclosed in the individual ("How to Talk about the Body" 227). Latour not only brings society into view but also the objects involved in embodiment and subjectivity.

2.3.2 Towards a New Disability Realism

As seen above, a new realist style is informed by negotiations of "matters of concern" rather than "matters of fact." With regard to literature, Latour wonders "what is it for any sort of entity to appear to be real in the narrative" ("Powers of the Facsimile" 5). Moreover, he continues his interrogation by asking how "the distribution of agencies between humans and non-humans [can] be made visible instead of being taken for granted" (5). Latour argues that a new realistic literary representation of life does, above all, not assume existence as a given. In the case of embodiment this means that the progressive acquisition and possible transformation of bodies need to be explicitly thematized in narrative. In his discussion of Richard Powers as the "novelist of 'science studies'," Latour extols how, "[e]xistence for a character in Power's novel is not a natural birthright but a risky achievement" (2, 7). Powers' literary strength resides in the deployment of a vocabulary which allows achieving greater proximity to the matters at hand. Hence, a new realist style (or matters-of-concern writing) provides a close look at the mechanisms producing, as well as complicating, existence and embodiment. When the representation comes together "bit by bit, layer by layer without deciding in advance what it means for a human, for an automaton, for an image … to have a shape," then the progressive nature of embodiment becomes visible (10-11).

Furthermore, a new realist style does not ground its figurations on *average* notions of the human, the body, or the computer. While this is the recipe for most traditional science fiction, Latour's notion of literary realism is concerned with making the "unexpected beings necessary for any entity to exist" visible. As a vital characteristic of a new realist style, such a critical stance on the variability of existence necessitates a marked focus on the material and immaterial relations between actors, both human and non-human. For a discussion of the body, Latour's rhetorical question: "What, then, is more realistic? To act as if continuity of existence

was an unproblematic given? Or to show that it can be a highly variable gradient, which can be intensified or attenuated as the story unfolds?" translates into the imperative to emphasize the material variability and interconnectedness of the body in a narrative (5). Latour states that, "[f]or any sort of humanoid character to exist they must become *connected*, or have life breathed into them, from some sort of other non-human entity" (5, emphasis added). It is not the independence of characters or their sovereign acting upon a passive setting that makes a narrative representation of (extraordinary) corporeality and subjectivity realistic but rather the foregrounding of associations in general, the process of their establishment and transformation, and more specifically a detailed look at the entanglement with and the constitutive role of actors, human and non-human. Latour's "incredible confidence in the capacity of description" is a confidence in the powers of literary realism to help us "understand the stuff out of which we, as living, breathing, speaking creatures, are made" (12, 10).

Within disability scholarship, it was Siebers who reclaimed attention to the reality of the body in 2006. Against decades of social and linguistic constructivism, largely influential within disability studies in the 1980s and 1990s, Siebers' essay invokes a "new realism of the body" ("Disability in Theory" 179). It is in the "gritty accounts of … pain and daily humiliations" that he identifies "the rhetoric of realism" (179). While Siebers articulates a concern for a particular "rhetoric," he is equally (if not more) interested in the ontology of disability. An embrace of, "not what we think it is but what it really is" marks his interrogation as less constructivist, and more essentialist (180). Neglected in semiotic discussions of the body, the "realism" Siebers insinuates points at the explicit physical reality, materiality, and daily living conditions of people with disabilities, which, as he notes, may help to establish a "renewed acceptance of bodily reality" (179).

Siebers' criticism is directed against an overly shadowy, theoretical negotiation of pain in current body theory where "pain … is rarely physical" (177). Conceptualizations of suffering and disability that celebrate an "opening up [of] new possibilities of pleasure" cannot be integrated into Siebers' vision of pain as "an enemy" (177). According to his uncompromising position,

> [p]ain is not a friend to humanity. It is not a secret resource for political change. It is not a well of delight for the individual. Theories that encourage these interpretations are not only unrealistic about pain; they contribute to an ideology of ability that marginalizes people with disabilities and makes their stories of suffering and victimization both politically impotent and difficult to believe. (178)

This account refrains from any differentiation of pain, envisioning it as a universal corporeal condition. While Siebers, on the one hand, concedes that "[p]hysical pain is highly individualistic, unpredictable," he nevertheless decides to operate with "pain" as a common and unambiguous experience, and a unifying element for people with disabilities (178). When addressing the sources and triggers, Siebers emphasizes that it is not exclusively the disability in itself but instead the "innumerable daily actions" and "the difficulty of navigating one's environment" that causes pain (177). People with disabilities face a "hundred daily obstacles that are not merely inconveniences but occasions for physical suffering" (177). In other words, pain is not by default an inherent quality of the disabled body but results from the interplay between body and environment. The "grittiness" that Siebers finds in "realistic" accounts of disability is nothing but an explicit negotiation of the body's materiality, of bodily fluids,

excretions, orifices, tubes penetrating, and bags attached to the body. He enumerates the material objects "that people with disabilities are forced to live with – prostheses, wheelchairs, braces, and other devices" that he considers "potential sources of pain" rather than "marvelous examples of the plasticity of the human form or devices of empowerment" (177). A recognition of Siebers' demand for a detailed description of the body's attachments and associations as a prerequisite for any approximation of the lived material body necessitates a terminology that accounts for the various actors and volatile connections that make the body. The strength of actor-network theory lies in providing the ontological leveling of human and non-human actors to make visible how prostheses, physician, physiotherapists, as well as personal attitudes, academic propositions, healthcare plans, institutions and legal regulations all have a certain agency in the articulation of a particular body.

While Siebers stresses the importance of "resisting the temptation to describe the disabled body as either power laden or as a weapon of resistance" in his struggle for "a realistic conception of the disabled body," I suggest that it is equally important to resist any over deterministic tie between disability and suffering (180). Siebers states,

> I am claiming that the body has its own forces and that we need to recognize them if we are to get a less one-sided picture of how bodies and their representations affect each other for good and for bad. The body is, first and foremost, a biological agent teeming with vital and chaotic forces. It is not inert matter subject to easy manipulation by social representation. The body is alive, which means that it is as capable of influencing and transforming social languages as they are capable of influencing and transforming it (180).

He characterizes the relationship between immaterial representation and material body as mutually transformative and foregrounds the physicality and capabilities of the body. Yet, the physical transformations involved in complex embodiment remain nebulous in his account. Only implicitly does Siebers bear testimony to the material relationship between body and environment. In his attempt to carve out the vitality and capabilities of the human body, he resorts to defining it against inert and passive matter, thereby reiterating a long-held ontological opposition between life and matter.

The ways in which things like prostheses, braces, and wheelchairs move the disabled user are, according to Siebers' definition, painful. Being put into motion is always difficult and materiality is always negative in its instances of elucidation. In following what Eve Sedgwick calls a "paranoid reading" method, there is little to be gained that is more productive about an encounter with disability materiality in Siebers' work.[70] In Siebers' negotiation, pain is not conceived of as an inherent quality but results from the interaction between person and environment. It is this interaction that holds the potential for sensory experiences, which are thus relational in nature. From this continuous gritty interaction within the individual network of interrelations, the Self emerges. Siebers asks, "What would it mean to esteem the disabled body for what it really is?" (181). My provisional answer to this ontologically driven question is that by means of the discernment of the disabled body's unique material interrelations its appreciation can be approached.

Rather than pain, it is creativity, pleasure, and plasticity that Shildrick is concerned with in her negotiation of the concept of disability. While she parts ways

[70] See Eve Kosofsky Sedgwick's *Touching Feeling* (2003).

with Siebers with regard to the ramifications of unstable corporeality, Shildrick does assert the fundamentally messy (i.e. material) nature of embodiment pleading that, "all corporeality is inherently leaky, uncontained, and uncontainable" (*Ethics of the Body* 7). With recourse to the works of Jacques Derrida, as well as Gilles Deleuze and Félix Guattari, Shildrick provides a vantage point that focuses on the body's "plasticity … and the capacity of disparate parts to constitute hybrid assemblages" ("Border Crossings" 148-9). Her account moves far beyond an "endeavour to restore the clean and proper body" (138). The incorporation of "non-self matter [cannot restore any] originary wholeness [since the body has] never been self-sufficient [and a] 'natural' self-complete and singular embodiment is an illusion" (140). Prostheses can thus be understood to "contest the illusion of an originary unified and singular body, exposing instead the fluidity of categorical boundaries" (142). In search of adequate conceptions and terminologies to describe the conditions of what is considered "disability," Shildrick advocates to "open the field to a nexus of unexpected but constitutive assemblages that disorder the very idea of normative corporeality" (140). Shildrick manages to capture this "fluidity" by drawing on Deleuze and Guattari's understanding of "desire," according to which the "embodied self—rather than being goal-driven and singular as it would be in a modernist model—becomes a network of flows, energies and capacities that are always open to transformation" (143). Adopting this notion of the embodied self enables Shildrick, even more forcefully, to move away from what the (disabled) body is and towards what the (disabled) body can become. Shildrick holds,

> [i]n shifting the emphasis from the integrity and co-ordination of the whole body to the provisional imbrication of disparate parts, it is no longer appropriate to think of bodies as either whole or broken, able-bodied or disabled. Embodiment is simply a provisional manifestation in a process of becoming driven by the circulation of desire. For Deleuze and Guattari, such flows of energy extend embodiment beyond the merely human (145).

In "the dynamic and always unfinished processes of assemblage [that] point to the unlimited potential of becoming," Shildrick identifies value for contemporary discussions of the disabled body (146).

In this book, I argue that the productive becomings of disability in Shildrick and Siebers work analogous to the progressive development of the extraordinary bodies that are represented in Gibson's work. There is a humanist undercurrent in Gibson's early fiction in that the conceptualizations of the disabled body are grounded in the notion of a coherent, rational, autonomous self that is contained in the visceral tissues of the body. Yet, these conceptualizations evolve towards an extended notion of embodiment, especially from the Bridge trilogy onwards. Parallel to developments in disability studies, Gibson's fiction mirrors the ways in which the days of repair as the answer to corporeal deficiency or damage are long gone since the illusion of the norm has been exposed. In accordance with Mitchell and Snyder's argument in *Narrative Prosthesis*, one recognizes that the "prostheticized body is the rule not the exception" (7). Corporeality, rather than static or enclosed, is now considered dynamic and fluid. Moving through a field of diverse forces, the body is constituted by its possibilities of entering into relations with other bodies. In Shildrick's approach, Deleuze and Guattari's notion of "assemblage" aids in organizing the incessant change and reconstruction of the embodied self that exists in a condition of perpetual becoming.

It is against the backdrop of new materialism theories, which update the problematization of the life (vital, active) versus matter (inert, passive) binary, that disability studies has come to conceptualize a "new disability materialism." In their volume *New Materialisms*, Diane Coole and Samantha Frost aim for a return to "the most fundamental questions about the nature of matter and the place of embodied humans within a material world" (3). Coole and Frost argue that,

> materialism's demise since the 1970s has been an effect of the dominance of analytical and normative political theory on the one hand and of radical constructivism on the other. These respective Anglo-phone and continental approaches have both been associated with a cultural turn that privileges language, discourse, culture, and values . . . we believe it is now timely to reopen the issue of matter and once again to give material factors their due in shaping society and circumscribing human prospects (3).

Along similar lines, political theorist Jane Bennett draws on a plethora of philosophers to develop the idea of "vibrant matter" in a politico-philosophical take on materiality. Indebted to the critical vitalists, Hans Driesch and Henri Bergson who provided a vocabulary to address the power and drive, as well as the productivity and creativity inherent to matter, Bennett develops her own, more radical conceptualization. Bennett explains:

> While Driesch does not go as far as I do toward a materialist ontology, he does insist that the 'vital principle' has absolutely no existence independent of 'physio-chemical' matter. He makes the relationship between matter and life as close as it possibly can be while still retaining the distinction … he pushes the life-matter binary to the limit, even though at the very last minute, he draws back from taking the plunge into a materiality that is *itself* vibrant or active ("Vitalist Stopover" 49).

Bennett's *Vibrant Matter* (2010) presents a two-fold undertaking in that it is a philosophical, as much as a political intervention. In the philosophical strand, Bennett concentrates on "thinking beyond the life-matter binary" in order to "theorize a materiality that is as much force as entity, as much energy as matter, as much intensity as extension" (20). Methodologically, her work develops "a vocabulary and syntax for, and thus a better discernment of, the active powers issuing from nonsubjects" (ix). Thus indebted to ANT, and further "cultivat[ing] the ability to discern nonhuman vitality," Bennett ultimately intends "to promote greener forms of human culture" (*Vibrant Matter* 14, x). This project involves "the ethical aim … to distribute value more generously, to bodies as such" (13). How could Bennett's appeal for the revaluation of bodies in general, which seems to resonate well with the new realist demand for an explicit appreciation of the disabled body, inform the conceptualization of non-normative corporeality?

In her new ontology of matter, Bennett develops the concept of "thing-power" with reference to atomists like Lucretius and Epicurus, as well as cutting-edge sciences like complexity and chaos theory. In acknowledging the vitality of matter, defined as "the capacity of things—edibles, commodities, storms, metals—not only to impede or block the will and designs of humans but also to act as quasi agents or forces with trajectories, propensities, or tendencies of their own," she decidedly sides against the paradigms of social and linguistic constructionism (viii). This is because

social and linguistic constructionism take matter primarily as the carrier of meaning, the passive product of discourse. With recourse to Bennett, I will argue that Gibson's figurations raise awareness of "the curious ability of inanimate things to animate, to act, to produce effects dramatic and subtle" (*Vibrant Matter* 6). Moreover, reading Gibson with Bennett's vital materialist approach in mind, allows us to discern and esteem not only "humans and their (social, legal, linguistic) constructions" as actors but also "some very active and powerful nonhumans: electrons, trees, wind, fire, electromagnetic fields" (*Vibrant Matter* 24). From such a perspective, the interactions with prostheses, wheelchairs, braces, and other devices come into a different light. The new relationship is one of symmetrical, rather than hierarchical, interrelation between human and non-human actors, and disability becomes one of many various forms of agential embodiment rather than the categorical other to normative embodiment.

New materialist approaches have already found their way into disability studies, as in Mitchell and Snyder's latest publication *The Biopolitics of Disability*. The two scholars discuss in depth what they call "antinormative novels of embodiment" in which they identify narratives that "employ disability's radical potential to unseat traditional understandings of normalcy" and "explore disability as revelatory of variation's potential for innovation" (182, 181). Mitchell and Snyder refer to alternative modes of representing non-normative corporeality in contemporary novels by, among others, Richard Powers and Stanley Elkins, to develop the notion of "capacities of incapacity." Their analyses draw on new materialist discourses and thereby embrace a vocabulary that allows for a recognition of the agency of matter. The power of alternative representation resides in the novels' foregrounding of "imperfection as a creative, biological force," which echoes Siebers' emphasis on a "biological agent teeming with vital and chaotic forces" (182, 180). While non-normative corporeality is crucial to all three approaches, for Siebers it is mainly associated with the experience of pain. By contrast, Mitchell and Snyder conceptualize the vital, chaotic, biological forces of the body in terms of capacities for creativity and innovation. Here we can observe Siebers' impulse of a "new realism of the body" converging with what Mitchell and Snyder call "new disability materialism" (182). By incorporating "materiality" into their analytical vocabulary, Mitchell and Snyder put renewed emphasis on the agentive and dynamic nature of the non-normative material body and depart further from the notions of passivity and deviance that are rooted in the medical parlance of pathology and dysfunctionality. Their process-oriented notion of biological multiplicity is read with considerations of neoliberalism, in particular its "unethical profiteering practices" and a value system mainly based on economic productivity (189).

3. Revisiting the Body in Gibson's Reception

THE BODY IN GIBSON'S CYBERPUNK FICTION

Before I turn to my analysis of Gibson's representation of extraordinary bodies in chapter 4 of this book, I provide an overview of how Gibson's novels have been received in general and to what extent the body has been considered significant for his work. Gibson's debut novel *Neuromancer* (1984) has been received as a literary breakthrough. With "a new intensity of emphasis [and] sharpness of focus" on traditional science-fiction (sf) motifs, a new subgenre was born (McHale, "Towards" 7). Although the term "cyberpunk" is said to originate in Bruce Bethke's eponymous short story from 1983, cyberpunk fiction only came into view a year later with Gibson's first novel.[71] In accord with Brian McHale, Neil Easterbrook holds that "*Neuromancer* represents both a radical break with sf and a profound revivification of its most cherished conventions" ("William Gibson" 88). Gibson has not titled any of his trilogies himself, *Neuromancer*, *Count Zero* (1986) and *Mona Lisa Overdrive* (1988), but critics determined "the Sprawl," or the vast cityscape that provides the setting for all three narratives, as the common denominator. Others choose the virtual setting instead and speak of the "cyberspace trilogy" or "matrix trilogy." Both titles are much less common.

Although the building blocks of traditional sf and cyberpunk sf generally coincide, they differ in the style of representation. Traditional sf presents more "glamorous showcases of high technology" whereas those of cyberpunk are evocative of "orbiting slums—shabby, neglected, unsuccessful, technologically outdated" (McHale, "Towards" 8). McHale elucidates:

> [t]he novelty of cyberpunk … lies not in the absolute newness of any particular component or components, but in a shift of dominance or center of gravity reflected in the combination of components and their relative conspicuousness in cyberpunk texts (6).

Neuromancer is, therefore, as Easterbrook puts it, "less notable for its exciting plot than the rich texture of its prose, its foci of attention, its engagement with mass culture, and the way it crystallizes many separate threads that would subsequently transform sf" ("William Gibson" 87).

Often compared with and defined in opposition to postmodern fiction, cyberpunk literalizes what in postmodern fiction merely "occurs as a configuration of narrative structure or a pattern in language" (McHale, "Towards" 6). For instance, the concept of a fragmented self, a common trope in postmodern fiction, is taken literally as Gibson portrays the physical break-up and technological re-composition of bodies in his cyberpunk novels. As another example, the common literary technique of allowing the reader to view the same events through the lens of different characters in the same story is often achieved by alternating the narrative point-of-view. This

[71] In his brief essay "What is Cyberpunk?" (1986) Rudy Rucker points towards science fiction author and editor Gardner Dozois as presumably the first to have used the term with reference to the fiction of William Gibson.

principle undergirds Gibson's fictional technology of "simstim,"[72] which literally allows characters to access other characters' perceptual sensorium. Through the use of implanted software, characters are able to slip into foreign nervous systems and share all sensory information. On a similar note, new digital media allows for human existence as digital uploads in cyberspace, as well as the literal unification of man and machine. These examples may illustrate McHale's contention that cyberpunk, "tends to 'literalize' or 'actualize' what in postmodernist fiction occurs as metaphor" ("Towards" 6). All these literalizations, or personifications, partake in the negotiation of the boundary of the human body. Moreover, this desire for unification can be read in romantic terms.

This novel type of representation in cyberpunk can be traced back to a new presence and accessibility of media. As Cavallaro holds,

> Cyberpunk writers and artists have actually witnessed the birth and growth of technologies that earlier generations of science-fiction authors could only fantasize or speculate about. As Steve Brown points out, instead of having to invent visions of the future practically from scratch, they have been in a position to collect 'bits and pieces of what was actually coming true, and feed it back to the readers who were already living in Gibson's Sprawl, whether they knew it or not (19).

William Gibson wrote *Neuromancer* in the early 1980s, a decade marked by the radical change provided by the ubiquity of personal computers and the internet which began to invade not only the realm of personal lives but of identities as well. Fascinated by the upcoming technological suffusion, Gibson explains in an interview that he, "had a hunch that it was going to change things, in a way the advent of the ubiquity of the automobile changed things. It changed how we dress, how we eat" (*No Maps* 26 min). His friend and literary affiliate Bruce Sterling adds that, "this thing [computer technology] was a supermodel among technologies ... the boundaries of the human body would be crossed" (26min). This is a statement that I see as heralding the departure from hitherto conceptions of the human body, its boundaries and potentials, its limitations and abilities.

Given the interest in the body the genre appears to take, it is almost surprising to find the reception of the Sprawl trilogy focused to a great extent on a supposed celebration of the mind. Sherryl Vint holds, "[t]he world of cyberspace is the consummate world of the Cartesian dualist: in cyberspace, one *is* the mind, effortlessly moving beyond the limitations of the human body" locating "[t]he appeal of cyberspace [in] the repression of the material body" (*Bodies* 103). Vint's description reads less of Sterling's prophetic announcement of the crossing of the boundaries of the human body but seems to declare a desire for its overall elimination. The introduction of cyberspace, which is often read as a suitable illustration of Cartesian dualism, appears to overshadow the negotiations that take place on the corporeal side of the interface. What in Vint's observation still functions as an illustration, dwindles into cliché in other receptions of Gibson's work. Misreading Gibson's depictions of bodies as longing for transcendence led critics to ascribe an

[72] Henthorne explains the technology of "simstim" in his glossary as follows: "An immersive form of virtual reality that directly stimulates the brain, simulating the experience of others. In the novels and stories set in the Sprawl, simstim is a primary form of entertainment. Simstim technology is also used in navigating cyberspace, users connecting their nervous systems directly into cyberspace with cyberdecks" (137).

uncritical celebration of the virtual in his work. Consider, for instance, McCarron, who states, "[t]he interest cyberpunk writers take in the body is of strictly negative kind; a kind which consistently affirms, and even celebrates, the Cartesian dichotomy" (262). The negotiations of the nexus between body and mind that do exist in Gibson's trilogies, are misread as depicting the Cartesian split along with its devaluation of the body. McCarron detects a "fascination with the ways in which the flesh is inessential, irrelevant" and a desirable portrayal of "pure mind" attested as "the genre's ultimate goal" (267, 262). Vint resumes this type of criticism in stating that cyberpunk is, "a genre best known for its rejection of embodiment and embrace of an existence in cyberspace" (*Bodies* 102). In the following, this thesis explores the ways in which Gibson's work demonstrates an acute interest in embodiment and rejects easy solutions of an existence exclusive to cyberspace. My argument defines itself against McCarron's conclusion that, "[t]he body's accidental and ultimately unnecessary corporeality is stressed throughout Gibson's work" (267). Furthermore, my analysis contrasts with Vint's reading that *Neuromancer* is about the "consequences of forgetting that we are embodied human beings" (*Bodies* 112).

Not blinded by the occurrence of new media in *Neuromancer*, some critics have recognized that literature by the father of cyberspace is, in fact, all about the embodied human being. In a short essay contributing to a collection on key figures in science fiction, Easterbrook states that *Neuromancer's* "treatment of prosthetic or cybernetic modification suggests a step toward a coming posthuman or cyborg amalgam of human and machine, the confrontation and conflation of which have remained a central trope in sf since the beginnings" ("William Gibson" 88). Hence, there *are* occasional instances demonstrating awareness of Gibson's negotiation of the boundaries, the extension, and the interdependence of the body. Critics have often linked discussions of the body in Gibson to the figurations of the cyborg and the posthuman. Easterbrook, furthermore, points to the, "decentralized personal agency, often aided by prosthetic or cybernetic alternations of the human body" in *Neuromancer,* highlighting a preoccupation with prostheses (87-8). With its treatment of the technological modification and rehabilitation of the insufficient human body, sf presents itself as a discourse distinctly predestined to, "allow us to concretely imagine bodies and selves otherwise, a discourse defined by its ability to estrange our commonplace perceptions" (Vint, *Bodies* 19). Against the backdrop of the pervasiveness of "Other" bodies, cyberpunk, I argue, like no other genre, manages to capture the material reality of physical disability. Despite her awareness of the ways in which discourses can shape how we think and feel about the human body, Vint seems oblivious of disability:

> [t]he ideas that we have about what is natural or proper for our bodies influence what our bodies can and cannot do, and preconceived ideologies will determine what science will or will not find when it looks at them. Ideology is the source of these various discourses that inform our ideas about our bodies and hence inform our experience of the lived body (*Bodies* 18).

In other words, science fiction can serve as a testbed to act out ideas offside cultural doctrines while maintaining a critical distance. This book seeks to recontextualize the body and discuss its representations in Gibson's cyberpunk as well as post-cyberpunk fiction. None of his novels are driven by what Garland-Thomson calls "normates" and still the significance of the characters' corporeal extraordinariness is rarely taken into

consideration; discussions of constructions of disability have never fully entered the discourse.

THE BODY IN GIBSON'S POST-CYBERPUNK FICTION

Three years after its publication in 1993, literary critic Takayuki Tatsumi admires Gibson's first post-cyberpunk novel *Virtual Light* for its literary co mposition of the San Francisco-Oakland Bay Bridge with the following words:

> I have never seen a more brilliant construction of a bridge than William Gibson's fourth solo novel … which beautifully envisions the near-future, hyperrealistic, and junk-artistic atmosphere on the postearthquake San Francisco Bay Bridge in a fictional 2005 (61).

Tatsumi had not foreseen the significance the Bridge came to have as a unifying setting—almost a character itself—for the two following novels. William Gibson's second, "[m]ore sedate and understated" trilogy comprises *Virtual Light*, *Idoru* and *All Tomorrow's Parties* (Easterbrook, "Recognizing" 50). Different from the original, the literary Bay Bridge was closed after a huge earthquake called "the Little Grande," disconnecting the traffic between San Francisco and Oakland and unleashing the territorialization by ex-hippies, homeless, and street people. In the vein of a "neo-tribalism" (Bauman, *Intimations of Postmodernity*) and "neoregionalism" (Jameson, *Postmodernism*), this self-organizing and self-governing community is referred to as the "bridge people." In the Bridge trilogy, Gibson depicts a near rather than distant future which, traumatized by devastating earthquakes, grapples with the challenges of reconstruction.

All action revolves around a pair of virtual light glasses that overlay reality with virtual information in *Virtual Light*—a technology that will evolve over the course of Gibson's novels into "locative art" that creates "annotated environments" in *Spook Country* (173). When Chevette, bike messenger and bridge-resident by accident (or fate) steals the glasses at a party, she attracts some serious henchman and corporate hitman to track her down as the stolen glasses carry top secret plans for the total rebuild of San Francisco by nanotechnology. *Virtual Light* provides the introduction to a new universe of the near future, featuring a miscellaneous version of the San Francisco-Oakland Bay Bridge as a significant backdrop for all three novels, and a revolutionary new technology that operates on a scale so small that it borders on virtuality, and yet facilitates the manipulation of matter. With regard to the significance of materiality to Gibson's post-Sprawl novel, Tatsumi notes that *Virtual Light* "gives priority to junkyard over cyberspace, bike messenger over cyber-cowboy" (114).

In *Idoru*, which is set for the most part in Tokyo, the San Francisco-Oakland Bay Bridge, while providing the start and end point of the trilogy, only appears in the form of a "virtual analog" of cyberspace's Walled City (Easterbrook, "Recognizing" 52).[73] The bridge as geographical anchor recurs on a conceptual level but is fully

[73] In contrast to the Killing Floor ("Johnny Mnemonic") and the Bay Bridge ("Virtual Light," "All Tomorrow's Parties"), Walled City ("Idoru") is an entirely virtual space modeled on the actual Kowloon Walled City in Hong Kong. Kowloon Walled City has been known for its radical increase in population from the late nineteenth century to 1993, when the government demolished it. In the 1990s

revisited as a setting in *All Tomorrow's Parties*. In many respects, the trilogy depicts a bridging from the Sprawl to the Bigend novel. This is especially true for *Idoru*, whose transitional element not only lies in one of its main protagonists, Colin Laney, but also "bridges the relation between Case and Cayce" in a continued negotiation of the nexus of body and environment (51). The idoru,[74] a computer-simulated idol, is the lynchpin of the story. News about the rock star Rez's (from the band Lo/Rez) announcement to marry the "personality-construct" gives reason for concern to fan clubs and Rez' staff so that both Colin Laney, a data specialist, and Chia McKenzie, a fan club representative, are set up to clarify the rumors. It is in the idoru's liminal status between the virtual and the material that the notion of the body is recurrently problematized throughout the entire trilogy. Similar to the Sprawl trilogy, Gibson is concerned with the corporeal extension and entanglement into cyber- and physical-space, which is negotiated with marked bias for materiality. In this regard, one can observe a stronger focus on the body's visceral contingency on its environment and its mutual influence and interference. Instead of employing the concept of disability merely as a narrative prosthesis, Gibson begins to interweave disability into a more complex fabric of forces. Through more ambiguous entanglement, issues of disability are given increased conceptual depth. In the Bridge trilogy, the characters' bodies are neither wholly repaired nor strikingly enhanced, and yet the commodification of the body still pervades in all three novels.

This post-cyberpunk trilogy closes with a paradigm shift. *All Tomorrow's Parties* finally resolves the idoru's desire for corporeality in providing the nano-assembling technology that allows for her materialization by a nanofax device in a Lucky Dragon drug store on the Bay Bridge. Facilitating this historical event, data analyst Laney indulges in data complexity to an extent that classifies as addiction and leads to his death rather than salvation.

With its evolution away from cyberpunk tropes, the Bridge trilogy invests in posthuman data-architectures, nanotechnology, and meticulous descriptions of the Bay Bridge which do not satisfy "technofetishistic desires" and thus do not resonate well with all readers. Ross Farnell notes that,

> by the time he came to write *Virtual Light* the notion of "cyberspace," if not completely discredited, had at least fallen into the realm of predictable cliché, a standardized trope of cyberpunk fiction. Like cyberpunk itself, the novum of cyberspace had moved from potent narrative device to cynical marketing technique and commodified hyperreality, thereby attaining an escape velocity which transported it from the realms of sf and text and into the mainstream media-hype of technofetishistic desire (461-2).

This has lead to an initial decrease in Gibson's reception. Farnell bemoans, "three years between the publication of Gibson's *Virtual Light* and his latest novel, *Idoru*, the critical silence has been deafening" (459). After the publication of *All Tomorrow's Parties*, Graham Murphy concurs "[y]et two decades following the publication of *Neuromancer* (1984), and critics continue to focus on Gibson's first trilogy, even though the publication of *All Tomorrow's Parties* (1999) closed out what can now

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it hosted around 50.000 residents on two and a half hectares of land and was the most densely populated and largely ungoverned area (Routley).

[74] 'Idoru,' a term coined by Gibson, suggests a pun on its function. Short for 'I adore you,' this is exactly the response the Japanese virtual idol and commercial media entity by the name of Rei Toei generates in her audience.

loosely be called the Bridge sequence" (72). Most of the literary criticism that did emerge, as in the case of Farnell and Murphy, focused primarily on media topologies, hyperreality, and the modes and significance of the posthuman.

In contrast to voices that attest a clear hierarchy of interest in Gibson's work as prioritizing technology above all else, Tom LeClair argues, "Gibson has never been much interested in people except as products of or reactors to his high-tech and lowlife environments" (4). Kyle A. Wiggins observes not only a deliberate attentiveness to but also significant changes in the negotiation of human beings and human bodies in Gibson's Bridge novels. Wiggins remarks, "William Gibson's revision of his own theory on bodily transcendence is perhaps the most substantive evidence of the transition of cyberpunk literature into a postcyberpunk mode" (79). In *All Tomorrow's Parties*, Wiggins also emphasizes that, "Gibson reverses the trope of the cyberpunk leaving his/her body behind and mapping consciousness onto cyberspace," instead an "existence on the informational plane is the new prison and only substantiation can spring a person" (81).

Even in discussions explicitly focused on the status of the body in Gibson's post-cyberpunk novels, the category of disability goes unheeded by most critics. In his analysis of digital space and the idoru, Murphy refers to the extraordinary corporeality of character Zona Rosa—a disabled, racialized, and female figure that is central to this thesis—uncritically, only in passing, and misspelling her name: "Zone [sic], a disfigured character who spends every waking hour online" (82). In seeking the re-evaluation of extraordinary bodies in the Bridge novels in this chapter, this thesis thus supplements excised readings of Gibson's fiction with the consideration of the visceral topologies of his work. To that end, my discussion of extraordinary bodies and their extension in cyberspace considers Gibson's increasing focus on materiality, the character's interactions and relationships with the data, material, and interpersonal environments, and the narrative style that begins to reflect subjectivity increasingly more mimetically.

THE BODY IN GIBSON'S NEW REALIST FICTION

Set a year before their actual publication, *Pattern Recognition* (2003), *Spook Country* (2007), and *Zero History* (2010) foreground questions that have been lingering in the periphery of Gibson's fiction since the 1980s. The novels comment on the distribution pathways of art, advertisement, and the military as well as the relationship between these supposedly distinct areas touching upon the nature of information, the purposes of surveillance and espionage, methods of data encryption, and technologies such as WiFi, GPS, and RFID. In his review of the novel, Anthony Byrt states that *Spook Country* provides a "sharp analysis of the international impact of America's 'war on terror,' and of the way that globalization allows unseen organizations to access information and wealth" (par.8). Em McAvan states that,

> Gibson's recent writing foregrounds the technologically mediated status of the present, and in particular the ways in which surveillance and paranoia have marked everyday life during the war on terror … Each of the characters is potentially a terrorist, or working for one (407).

With recourse to Frederick Jameson's notion of "postmodern sublime" and the idea that "paranoia is necessary to correctly grasp the full nature of the globalized world, for an exhausted realism cannot do so," McAvan discusses the ways in which,

> Gibson foregrounds the fact that contemporary surveillance is used for commercial as well as governmental reasons, persistently associating advertising with spying. In doing so, *Spook Country* effectively collapses the distinction between the two" (McAvan 407).

The fact that the Bigend trilogy overtly negotiates contemporary societal issues of a local and global scale rather than portraying conflicts of a distant future or virtual reality has led critics to declare "the return of repressed materiality" in Gibson's work (Jones, "Second Life" 271).

However, Gibson has always asserted that his (science fiction) novels are not prophecies of the future but rather that he draws on a science fiction toolkit to reflect on the weirdness of the present.[75] The degree of weirdness in reality has perpetually increased in a way that begs the question whether a science fiction toolkit is still appropriate to reach the required cognitive dissonance for grasping the present moment. Gibson's move towards a contemporary setting in the Bigend trilogy is moreover motivated by the fundamental dissolution of a clearly cut boundary between "the real world" and "cyberspace" or "virtual reality." No longer is cyberspace this distinctly other space that one needs to actively log into but the virtual overlies our realities and computer technologies infiltrate our lives.

In this sense, the reception of Gibson's Bigend trilogy has widely revolved around shifts in genre classifications. It was particularly *Pattern Recognition*, the first of the three novels that received scholarly attention because it struck a new note in the cyberpunk-father's narrative repertoire and initiated a new direction in his work. Ranging from post-cyberpunk, science-fiction realism, socioeconomic science fiction, to alternate history, speculative fiction, post-9/11 as well as post-post-9/11, critics have had difficulties placing the novels somewhere between science fiction and realism.[76] This struggle is exacerbated due to the fact that these two genre strategies appear to collapse into one another. Considering Gibson's work, Byrt observes, that "[s]ince 9/11 there has been a definite shift in his work" (par.1). Nevertheless, the Bigend trilogy does not quite fit the criteria of David Holloway's new genre category "The 9/11 Novel" which he sees applicable to, for example, Philip Roth's *The Plot Against America* (2004), Jonathan Safran Foer's *Extremely Loud and Incredible Close* (2005) or Cormac McCarthy's *The Road* (2006). In his book *9/11 and the War on Terror*, Holloway introduces the staging of "the child" as a "repository of goodness, hope, innocence" as a central trope in 9/11 novels (111).[77] The highly globalized world order depicted in these novels has motivated critics to reconsider the characteristics of contemporary literature as they are informed by such globalizing standards—for instance illustrated by Phillip Wegener's question "What Is Literature

[75] See, for instance, an interview with Gibson by Matt Roskoff (2016).

[76] See Krawczyk-Łaskarzewska's "Space over Time: The Urban Space in William Gibson's Techno-thriller Novels" (2015); Konstantinou's "The Brand as Cognitive Map in William Gibson's Pattern Recognition" (2009); Easterbrook's "Alternate Presents: The Ambivalent Historicism of 'Pattern Recognition'" (2006); Itzkoff's "Spirits in the Material Word" (2007).

[77] For a more detailed discussion see McAvan's "Paranoia in *Spook Country*: William Gibson and the technological sublime of the war on terror" (2010).

Now?."[78] While socio-politically inclined critics concentrate on the corollaries of globalization and the aftermaths of 9/11, and technophile critics focus on the meaning and implications of the instances of new, hi-end or retro technologies,[79] others engage in a general reflection on the impossibility of science fiction literature in the 21st century.[80] Now, the question arises how this thesis will handle this variegated reception. Any attempt to reconcile these positions or scrutinize Gibson's work even more thoroughly in order to classify it for good would mimic a modernist quest for purification, clear borders, fixed categories and definitive answers. Instead of settling the overall concerns, this thesis intends first "to feed off the controversy" in order to explore Gibson's textual hybridity.

Defined as a strategy to not only slow down an analytical process, Bruno Latour explains that, "feeding off controversies" also allows us "to trace more sturdy relations and discover more revealing patterns by finding a way to register the links between unstable and shifting frames of reference rather than by trying to keep one frame stable" (*Reassembling* 24). Secondly, after reviewing the actors operative in the representation of bodies and subjectivities, this thesis proposes to frame the respective narrative strategies under "New Realism." With this in mind, I cannot but agree with science fiction scholar Roger Luckhurst who considers Latour's actor-network approach a "useful guide to articulating the hybridity of recent sf" ("Scientification" 15). In his 2006 essay "Bruno Latour's Scientifiction: Networks, Assemblages, and Tangled Objects," Luckhurst introduces actor-network-theory into science fiction scholarship by asserting that,

> Latour allows us to read how these bizarrely heterogeneous formations operate. The complex socio-politico-scientific embeddedness of sf could be considerably clarified by Latour's approach to networks and assemblages, chains of weaker and stronger association that cut across science, technology and society (12).

While Luckhurst embraces ANT for its potential to help "explain why sf has become such a vital node in the collective for thinking through our contemporary matters of anxious concern," my goal here is more specific ("Scientification" 15).

Although the presented genre criticism, almost always framed by a Jamesonian perspective on postmodernism, is an essential part of the reception of Gibson's work, its extent overshadows much of what else is going on within as well as across the novels, namely the amount of diverse depictions of embodiment, particularly in *Pattern Recognition*. On the basis of a conceptualization of Gibson's extraordinary bodies, the mode of representation, so it will be argued, is "new realist." Most critics agree that *Pattern Recognition* (as a representative of the Bigend trilogy) is "[b]oth thematically and structurally, very much about *presentness*" (Easterbrook, "Alternate Presents" 485). Furthermore, critics often cite that the novel is about the "volatility and fluidity of the present moment" (Hollinger, "Stories" 462). To clarify, this present is understood as a "process-without-progress" (467). As much as this might be true with respect to the future of technological development, it is not true regarding Gibson's depictions of non-normative bodies. Indeed, in Gibson we find process *and* progress. It is important to note that Gibson's depictions of future technologies primarily function as a carrier medium for the incomparably wider

[78] See Phillipp Wegener's "Recognizing Patterns" (2007).
[79] See, for instance, N. Katherine Hayles' "Traumas of Code" (2006).
[80] See Veronica Hollinger's "Stories about the Future" (2006).

negotiations of entanglement between technological environments and the human animal. In an interview with John Johnston, Gibson notes that he is less "concerned with technological 'toys'" than with how the technologies behind them "impact the social animal in ways that the developers never thought of" (Henthorne 21). In other words, Gibson is less interested in understanding computer technologies as such, than in observing how people are entangled in them. For example, in 2007 he told PC Magazine, "I'm anything but an early adopter, generally. In fact, I've never really been very interested in computers themselves. I don't watch them; I watch how people behave around them" ("Q & A" 19).

In this sense, *Pattern Recognition* marks the pinnacle of a progressively centrifugal expansion of embodied subjectivities in Gibson's fiction. It is indeed tempting to read Gibson in support of this line of argument when he states in a 2003 interview with Locus magazine, "I've been threatening to write a book like *Pattern Recognition* for a long time: a novel that makes what I've *always been doing* overt" ("Locus interview" n. pag.).

Even more poignantly and explicitly than in any of his previous novels, disability in the Bigend trilogy presents itself affirmatively, less than ever before in need of resolution via prostheses, rehabilitation and/or enhancement. Corporeal wholeness is finally unmasked as an illusion. On that note, I read Neil Easterbrook's comment that "in the recent work Gibson has refused all evasive alibis and instead confronted both characters and readers with authentic, because unresolved, problematic[s]" as in line with my observation of Gibson's shift towards realistic representations of unresolvable (extraordinary) corporeality ("Recognizing Patterns" 57). In a similar vein, Janine Tobeck observes that, "the Bigend trilogy marks a turn for Gibson, not just into the present, but into new explorations of humanness, history, and community" ("Klein Blue Suit" 30). Not only Gibson's heterogeneous stylistic strategies, but also the abundant thematic knots, will in the course of this argument be read in relation to bodies and subjectivities. Thus, rendering their dynamic, relational, and semi-sovereign nature visible. In order to conceptualize Gibson's problematizing but irresolvable explorations into humanness, which manifest in the extraordinariness of the depicted characters, chapter 4.3 draws on an actor-network theory that is infused with new disability materialism.

4. The Extraordinary Body in Fiction

4.1 The Body and Medicine: The Sprawl Trilogy

When William Gibson started publishing in the late 1970s and early 1980s, it was a time of radical social upheaval followed by a series of redefinitions of social identities. Among movements fighting for civil rights were people with disabilities. From years of disability rights activism, the academic field of disability studies was established within the Humanities. Reading Gibson's novels in terms of bodies through a socio-historical lens his portrayals open up negotiations of multifaceted positions on corporeal otherness. At the same time, it is possible to read Gibson's depictions of bodies through the category of literary genre. Science fiction and particularly Gibson's early métier cyberpunk is interested less in the normal than the deviant; less in the hero than in the outsider, and less in the moderateness of life than in alternative ways of living. Even though there is something "wrong" with most characters in his novels, Gibson writes these disabled figures without reverting to the eugenic or clinical gaze.

Bodies in the Sprawl trilogy are extraordinary on many levels in that characters display individual corporeal or mental deviations from statistical norms as well as epitomize the marginalized status of social outsiders such as: drug addicts, hackers, hustlers, prostitutes, and street fighters. While the novels also feature extremely wealthy characters, these do not occupy the "normate" position on a physical or social level because their affluence is either obtained on illegal terms or they pursue illegal goals by means of it. Besides an elaboration of the typology of corporeal extraordinariness, I will examine the ways in which Gibson's novels question the normalistic complex by means of language, formal structure, and narrative perspective, and how these novels present alternative ways of being and living socially, individually, and corporeally. This chapter focuses on the modes by which extraordinary bodies are depicted while paying particular attention to the forms and rhetoric of prosthesis and embodiment, the underlying conceptual framework of the human body, as well as the literary functions of figurations of disability.

4.1.1 Prosthetics Paradise

Gibson's depiction of extraordinary bodies, I argue, can be best understood through a prosthetic logic which extends the analysis of prostheses to an examination of their underlying concepts of the human form and the relationship between the human body and its environment. Prostheses are the first form of corporeal extraordinariness encountered in *Neuromancer*. The start and end point of the protagonist's journey is the Chatsubo bar[81], which hosts a wild assortment of the Sprawl's most dubious figures including: drug dealers and addicts, street warriors, prostitutes and cyberspace cowboys. The signs of "Otherness" exhibited by the guests' extraordinary bodies

[81] The Chatsubo bar is also referred to as the "Chat" can also be read as the short form for "chat room." The meaning of the "chat room" in the sense of "an online messaging facility (esp. an Internet site) dedicated to real-time exchanges, usually on a particular topic" only appeared in 1989. The antecedent was the "chat line" which usually referred to "a telephone or electronic messaging service which enables subscribers to exchange casual conversation, either individually or by means of a conference line, with other subscribers or with employees of the service" ("chat room").

relate to physical alterations that involve bio-software and technological interfaces, and expose novel relations and boundaries of the human. The opening page introduces Case entering his most frequented bar and the first character he encounters is the barkeeper Ratz, who is primarily identified by his prosthetic arm: "Ratz was tending bar, his prosthetic arm jerking monotonously as he filled a tray of glasses with draft Kirin" (3). Whereas the cause of Ratz's lost limb is never clarified, his rehabilitation is the focus of attention. The execution of his job visually, as well as acoustically, marks his deviance and draws attention to his prosthesis: "the antique arm whined as he reached for another mug" (4). Further specified, his, "Russian military prosthesis, a seven-function force-feedback manipulator, cased in grubby pink plastic" qualifies Ratz as the classic example of an amputee and prosthesis wearer (4). The form of the bartender's prosthesis reflects the earliest versions of professionally manufactured prosthetic products.

Prosthesis suggests an idealized one-to-one replacement of a missing body part with an artificial substitute.[82] The specification of the military background of Ratz's prosthesis points to the historical origin of the proliferation of prosthetic technologies. Owing to medical advancements and the improved medical conditions on the battlefield at the time of World War I, more soldiers survived and returned home seriously injured. So-called war invalids, or disabled veterans, posed an economic and political problem; on one hand, disabled veterans reminded society of the collective trauma and on the other hand, of the soldiers' failure to maintain his culturally ascribed role as the male breadwinner. In order to appease society's desire for inconspicuousness and social "passing" as well as facilitate productivity, cosmetic prostheses with various optional attachments (hand, hook, cork screw) were designed.[83] After World War I, a whole new branch of research and industry was born and majorly financed by the military. For the first time, prostheses became a mass-produced good serving the integration of veterans into stable social relations and increasing their efficiency and performance. What these developments indicate about the cultural concept of the body in the 1910s and 1920s is its potential to be dismembered and partially replaced. In her book *Prothesen: Figuren einer lädierten Moderne*, Harrasser presents a lucid summary of the history of prosthetics, and the calculated fit between amputee and prosthesis, prosthesis and tool, tool and operation to demonstrate how prosthetics created a system of discrete interlocking units that can be taken apart and recomposed.

Historically, the 1940s and 1950s constitute another peak in the developments of prosthetics because the end of World War II produced another large influx of injured veterans. Endangering the "qualities of a certain brand of normative masculinity [such as] independence, reliability, efficiency, resiliency" war wounds, again, compromised the ur-attributes of the male American worker (Serlin, "The Other Arms Race" 49). At the same time, the era represents the pinnacle of new material science and new bioengineering principles. The confluence of these two phenomena gave rise to prosthetics as "its own biomedical subdiscipline" (51). Arising from this site- and time-specific context, "prosthetics developed during the 1940s and 1950s were linked explicitly to the fragile politics of labor, employment, and self-worth for disabled veterans" (51). At that point, prostheses had not yet been

[82] According to the *Oxford English Dictionary Online*, the Greek word prósthesis originally denotes a grammatical addition. Only in the eighteenth century does the term enter into the medical discourse and begins to signify "the replacement of defective or absent parts of the body by artificial substitutes." ("prosthesis, n2").
[83] See also Serlin's *Replaceable You: Engenieering the Body in Postwar America* (2004).

connoted with enhancing purposes in creating "supermen or cyborgs" but basically, "provided veteran amputees with the material means through which individuals … imagined and negotiated what it meant to look and behave like a so-called normal, able-bodied workingmen" (51).

Gibson's portrayal of Ratz's missing arm as replaced by a prosthetic supplement demonstrates a repair and re-composition that erases any notion of disability or invalidity. By means of a most likely mass-produced replacement, Ratz is able to pursue his profession, regain the status of able-bodiedness, and even more importantly, he maintains his masculinity as a resilient and self-reliant bartender. It is no coincidence Gibson introduces prosthetics by highlighting the hand as it is particularly the hand, more than any another body part, that makes the human a reasonable animal Georg Schlesinger, a German theoretician of machine tools, argues with reference to Immanuel Kant (Harrasser, *Körper 2.0* 93). Ratz's hand prosthesis is an extension of his body, satisfying cultural requirements of functionality and retaining humanness.

The cultural service and meaning of prosthetics only becomes problematic when the desired "normal" life and an "able-bodied" status is disclosed as an exclusive cultural construction. As illustrated earlier, "the norm" replaced the preceding concept of "the ideal" that delimits the human body from the *mythopoetic*, or the unattainable body of the Gods. This change in the ideological unconscious demarcates a crucial shift from a unifying to a separating conception of the human body. The introduction of, "the concept of the norm, particularly a normal body, [creates] thus in effect … the concept of the disabled body" (Davis, "Constructing Normalcy" 6). The progression in the field of prosthetics as developed in the way described above was guided by the underlying equation of disability with incapacity, disease, trauma, dysfunction, and other health conditions which were considered as requiring medical care. Known as the medical model of disability, this conception locates the source of disability in the individual body and aims at cure (Scully, "Variations" 59). Fundamental to this approach is the "rehabilitation paradigm," which articulates "the explicit objective" to facilitate clients to "attain [their] maximal potential for *normal* living" (qtd. Phillips, "Try Harder" 214, emphasis added). Potential for living outside the norm have not yet overhauled the normative impetus. Harrasser's observation that in neo-capitalist times, "[n]o one is a cripple, as long as they are productive" reverberates in the prevalence of normalizing technologies in Gibson's future paradise of prosthetics (*Körper 2.0* 95, my translation).

However, the availability of prostheses—in fiction as well as reality—comes in degrees as in neo-capitalist times it is profoundly dependent on social status and economic capital. Industrialization, the Gaussian distribution, World War I and II, and new materials are only some of the non-human actors contributing to the tightly-knit bond between disability, prosthetics, and economic productivity. Conditional availability is still a key parameter in the negotiation of disability to date, it is against this backdrop that Gibson's exceptional characters need to be read.

Given its post-industrial nature, the Sprawl trilogy displays a pluralistic society that is situated within a clear differentiation of mainstream and sub-/ or countercultures each providing their distinct set of rules and norms. At times, Gibson reflects on these varying norms explicitly, as in the example cell phones in *Count Zero*. Being mass-produced devices, phones are standardized industrial products that simultaneously standardize, or rather normalize their users:

> Most phone programs were equipped with cosmetic video subprograms written to bring the video image of the owner into greater accordance with the more widespread paradigms of personal beauty, erasing blemishes and subtly molding facial outlines to meet idealized statistical norms (*Count Zero* 234).

Similar to our modern Western societies, mainstream culture in the Sprawl is built on "idealized statistical norms," while subcultures consist of their own set of norms. For example, in the Gothicks:

> The majority approached the Gothicks ideal: tall, lean, muscular, but touched by a certain gaunt relentlessness, young athletes in the early stages of consumption. The graveyard pallor was mandatory, and Gothick hair was by definition black. Bobby knew that the few who couldn't warp their bodies to fit the subcultural template were best avoided; a short Gothick was trouble, a fat Gothick homicidal. (46)

Both, technical and material strategies aim at the adaptation of the individual body. Neither mainstream nor countercultures provide an all-inclusive environment but according to their particular rules, those not "fitting in" are excluded, avoided, or mistrusted.

4.1.2 Dis|Embodiment

Although Gibson depicts radically new relations between man and technology in the Sprawl trilogy, he insists on the embodied nature of the self. Following his insight that new personal computer technologies were going to change the human being's interlinkage with its environment, Gibson portrays an undated distant future rigorously ruled by retrofitted technology that enforces the integration of man and machine. The dystopian kaleidoscopic cityscape of the Sprawl is the shabby and desolate site from which characters embark on their individual journeys through spaces tinted with the paraphernalia of, "Japanese, Western, and Third-World, high-tech and low-tech, elite and popular, mainstream" subcultures (McHale, "Towards" 10). Entirely in line with the dismal depictions of a future typical of the 1980s, the Sprawl evokes the rainy, trash filled and neon lit streets from *Blade Runner* (1982), and dwellers traversing the Sprawl are subjected to a "maximally intimate juxtaposition of maximally diverse and heterogeneous cultural materials" (McHale, "Towards" 10).

Neuromancer's protagonist Case is entirely drawn to the new medium of cyberspace and accesses it through "a custom cyberspace deck that project[s] his disembodied consciousness into the consensual hallucination that was the matrix" (5). As a netrunner, Case professionally surfs the internet and hacks through security systems in order to obtain the requested data. Gibson's expression for logging into the matrix is to "jack in,'" which depends upon the interface between the nervous system and the computer system that is an electrode and a deck, with optional goggles, gloves, or implants. Lives in *Neuromancer* can, thus, not only be lead corporeally but, in addition, parallel on the vertical axis[84] of virtuality. As shown above, this modality

[84] The term goes back to McHale, who, while elaborating the forms of existence in the *Sprawl* trilogy, states that, "[i]t is possible, in other words, to adventure from parallel world to parallel world on the

of living is taken as specificity of the genre and from it the transcendence of the mind, and the outpacing of the body by the mind is extrapolated. Even though Case's name is evocative of a cheap computer case, the body is not a shallow container that is simply given or easily discarded but embodiment is questioned and ambivalently embraced.

What needs to be underscored is that the material body plays a central role in this constellation; it is retained as a fundamental prerequisite to jack into the matrix. Secondly, despite the fact that spending too much time in cyberspace implies the fatal real-life consequence of death, death does not need to be final. "Flatlining" while jacked into the matrix allows for the possibility of a wholly virtual existence. Indeed, there is the option of transcending corporeality because only the body dies while the disembodied mind continues to move freely through cyberspace. If this is the celebrated option of the disembodied mind and the dismissal of the burden of the body, this option is not favored by any character in *Neuromancer*. Gibson presents the epitome of becoming a disembodied mind in the character of Pauly McCoy, who "flatlines" during a run through the matrix and from then on "continues his life" under the name of Dixie Flatline, wholly in virtuality. With reference to the misconception that cyberpunk literature advocates the "embrace of an existence in cyberspace," it seems surprising that Dixie does not appreciate his virtual life. In fact, neither does he consider it virtual *life* at all—"I'm dead, Case" (105). Nor does he relish his state of being, wishing to be erased: "Do me a favor, boy … This scam of yours, when it's over, you erase this goddam thing" (106). Life in the novel is, thus, ultimately bound to the body. Dixie is not the only character actively breaking with the preference of mind over body. Case, too, is offered an existence in cyberspace, lured by the promise of redemption from earthly pains (244). At this turning point in the novel, the protagonist faces the decision between *disembodied* virtual or *embodied* material existence. Gibson presents a protagonist who takes conscious decision *for* the body.

Count Zero introduces a malicious wealthy art collector, Josef Virek, whose embodiment is extraordinary because it is fundamentally fragmented and distributed across a virtual and a material plane. Reminiscent of the philosophical "brain in a vat" thought experiment, Virek's cells literally live in a vat in "some hideous industrial suburb of Stockholm…a thing like three truck trailers, lashed in a dripping net of support lines" (16, 223).[85] Instead of a disembodied brain, Josef Virek consists of cancerous body cells hooked to a cyberspace deck. What drives the narrative thread revolving around Virek is his desire to "free himself" from, "the cells of [his] body [which] hav[e] opted for the quixotic pursuit of individual careers" (19). The wish to abandon his sick body and "overcome" disability indexes limitation, burden, and confinement—all common references in the literary depiction of disability. Virek is thus not looking for cure or maintenance regime for his disability, but rather an omnipotent virtual existence in cyberspace. Moreover, he believes he can be given this existence by the maker of anonymously distributed Cornell boxes. In order to find the artist, he hires Marly Krushkhova, a former art gallery owner, who at the end of the novel reveals the artist as an AI plotting against Virek given his menacing objective. Virek's embodiment is marked by an utter "reliance on technology" which when coupled with his "unnatural density of wealth" results in a massive extension (16, 18). The uncontrollable growth of his somatic cells is mirrored on a virtual plane

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vertical axis, just as one can from the microworld to microworld on the horizontal axis of the primary reality plane" ("Towards" 12).

[85] For a more detailed discussion of the "brain in a vat" trope see Cavallaro's "The Brain in a Vat in Cyberpunk: The Persistence of the Flesh" (2004).

in that Marly perceives Virek's "articulated structure" of his fiscal extremities everywhere she goes (93). Indeed, as Virek explains, he is "many things" and "[a]spects of [his] wealth have become autonomous…[h]is money has a life of its own" (16, 95). When Marly refers to a previous encounter, Virek explains that she must have seen "a double. A hologram perhaps" (16). The means of Virek's manifestation vary from projections, holograms to more abstract "subtle mechanisms" (93, 222). When Virek states, that he is "the world's most expensive invalid" it is fair to say that he is also the most *expansive* one (20). Virek's pursuit can serve as a prime example for how the quest of overcoming disability drives narratives. While most of Gibson's short fiction as well as the Sprawl novels in parts center on and thus may be read to exploit a character's corporeal extraordinariness, most post-*Sprawl* works revolve around a "McGuffin." As Westfahl elucidates, "Gibson combines these innovative elements with a traditional sort of story, with characters intent on obtaining a valuable object—what Alfred Hitchcock termed a 'McGuffin,' the director's way to convey that its nature is unimportant, since its function is solely to keep the plot in motion" (36).

Count Zero and *Mona Lisa Overdrive* present an increasing interest in the relation between embodiment and the category of humanness. Characters in the novels constantly debate and question the extent of one another's humanness on the basis of corporeal configuration. The degree of Virek's extension makes Marly and her friend Andrea ponder his status as a human individual. Andrea cites theories that declare Virek as "already far from human" and asking, "*is* he an individual? In the sense that you are, or I am?" she answers with a simple "No" (130, 128). Both, the category of humanness, and individuality are grounded in the body. Virek's pursuit to discard his "sick" body and perform an "evolutionary jump" fails due to what his security system calls "overextension" (292). Human existence can only be stretched so far. The novel suggests humanness is bound to the (extraordinary) body, which for that alone is explicitly valued. While Gibson underscores that the body does not end at the skin, its boundaries do exists be they neither clear, nor definitive.

Despite the fact that the undertones of the "body is meat" slogan of *Neuromancer* pops up now and again, the Sprawl trilogy champions a reliance and appreciation of corporeality by focusing on intuition and affective experience. To find the maker of the Cornell boxes and ultimately salvation, Virek hires Marly on the basis of her intuition: "I suggest, however, that you work on a scale with which you yourself are comfortable. Otherwise, you run the risk of losing touch with your intuition, and intuition, in a case such as this, is of crucial importance" (19). Intuition is bodily in that it expands perception, it allows affectation, and it recognizes one's involvement in an interplay of activities. Or, in Brain Massumi's words: "'Intuition' is the feeling for potential that comes of drawing close enough to the autonomous dynamic of a variational process to effectively donate a measure of one's activity to it" ("Sensing the Virtual" 22). It is noteworthy that in a world suffused with technological aids Virek, the richest and most influential man, resorts to and confides in mammalian instinct and human intuition rather than advanced technology for the purpose of his existential endeavor. The concept of intuition re-appears in the guise of "hyperfocus"[86] and "hypersensitivity"[87] in the characters of Colin Laney (*Idoru* and *All Tomorrow's Parties*) and Cayce Pollard (*Patter Recognition*) in the later trilogies.

[86] See chapter 4.2 of this book
[87] See chapter 4.3 of this book.

The fascination for and appreciation of sensory and affective experience is illustrated in *Neuromancer* when Case finds actual pleasure in the nexus of body and mind. This is especially apparent when the two cannot be told apart easily, when the Cartesian line blurs:

> He couldn't think. He *liked* that very much, to be conscious and unable to think. He seemed to *become each thing* he saw: a park bench, a cloud of white moths around an antique streetlight, a robot gardener striped diagonally with black and yellow (155-6, emphasis added).

In this Romantic desire for the unity of body, mind, and environment, the idea of taking pleasure in embodiment is taken even further. In destabilizing the boundary between himself and his environment, Case savors the material extension of embodiment.

The sensation of fear appears as another instance of the embrace instead of the rejection of the body. Case's description of this basic emotion as a "half-forgotten friend" reveals a relationship that defies the oblivion of embodiment (18). Case "remembered … the meat, the flesh the cowboys mocked. It was a vast thing, beyond knowing, a sea of information coded in spiral and pheromone, infinite intricacy that only the body, in its strong blind way, could ever read" (239). It is sentences like these that epitomize Gibson's literary style. By means of a coalescence of technical, medical, and imaginary language Gibson manages to capture the lived experience of embodiment as well as convey an appreciation of the body. It is not the matrix that represents the pinnacle of information, the source of infinite intricacy, but it is the body that is valued in its vastness, its unreadable and infinite coding, and its unknowable potential. In contrast to the alleged repression and devaluation of the body in cyberpunk, the above figurations highlight Gibson's interest in the body, its modalities and the acknowledgment of "a certain visceral appeal" (*Count Zero* 133).

4.1.3 The Body is a Machine

Given this interest in embodiment, Gibson explores the mechanical notions of the body even more dramatically in the successive novels. In *Count Zero*, Gibson draws the picture of Turner, a soldier and "specialist in the extraction of top executives and research people," who is hired to facilitate the enticement of a high-profile biochip developer, Christopher Mitchell (5). However, the mission is not completed as planned, since Mitchell himself is not on the rescue plane but instead his daughter and company kid Angela (Angie) Mitchell. Turner's team is attacked and Christopher Mitchell dies. One strand of the narrative follows Turner who, as we are told in a flashback, fell victim to a bomb explosion and was torn to pieces on his last mission in India:

> Because he had a good agent, he had a good contract. Because he had a good contract, he was in Singapore an hour after the explosion. Most of him, anyway. The Dutch surgeon liked to joke about that, how an unspecified percentage of Turner hadn't made it out of Palam International on that first flight and had to spend the night there in a shed, in a support vat. It took the Dutchman and his team three months to put Turner together again. They cloned a square meter of skin for him, grew it on slabs of collagen and shark-

> cartilage polysaccharides. They bought eyes and genitals on the open market. The eyes were green (1).

Since cloning and the availability of organs from the open market are presented as common cultural practice, the limiting factors are, by implication, money and time and not the feasibility of restoration as such. Such representation is undergirded by the metaphor of the body as a machine. That is, the body as a collection of working (and nonworking) parts that can be individually exchanged without affecting the person's subjectivity. Turner is first recycled in a clinic and then reactivated for another mission by his employer—both activities reverberate in his name.

In the case of Angela Mitchell, technology invades the body when she receives an implant that guarantees a permanent connection with cyberspace, a channel that is open both ways. She can access cyberspace and individuals who are jacked in, and the AIs pervading the matrix can access and guide Angie. Her extraordinary body is thus partly material and partly virtual. Upon the realization thereof, she verbalizes the feeling of having several lives, and "no hope for wholeness, ever" (*Mona Lisa Overdrive* 2). The mechanical undercurrent in the description of her embodiment becomes even more apparent in Angie's regular check-up, which is tellingly not performed by a doctor but a technician. The narrator declares, Piper Hill was the "best troubleshooter" (97). Just like a machine, Angie's sensory organs are calibrated for optimal adaptation. While Angie "did as she was told, running the tips of her fingers lightly across the raw silk and unbleached linen of the rumpled bedspread," Piper adjusted her perception, so that "Angie felt the weave thicken beneath her fingertips" until "[s]he could distinguish the individual fibers …know silk from linen" (96). Only after "[h]er nerves screamed as her flayed fingertips grated against steel wool, ground glass" the optimal setup was announced. One after the other the tactile, olfactory, and gustatory senses are tested until they are "up" (96, 97).

In line with the "the body is a machine" metaphor, after the surgery is completed, Turner is released with the words: "You can go home now, Turner. We're done with you. You are good as new" (*Count Zero* 2). Literalizing the potential of dismembering the body and the replaceability of its individual units in a mechanical fashion, the novel carries this concept to the extremes and starts off with the re-assemblage of its protagonist. Yet, on an interpersonal rather than functional level, Gibson leaves room for doubt. On their first encounter after the medical procedure, Turner's brother Rudy observes: "You look different … The same, but different … You get a face job or something?" (169). At this point the narrative can be read as subverting the machine logic of (re)producing identical copies in that any reconstruction cannot but bring about something or somebody new.

In addition to being reassembled almost from scratch, Turner is not only "good as new" but effectively better. He received "[b]ehind his left ear a socket to plug things in" (3). This additive feature allows him, with the appropriate software, to upload new abilities instantaneously, be it language or technical skills. The narrator informs that, "Turner extracted the dustplug from the socket behind his ear and inserted a silver of microsoft. The structure of Spanish settled through him like a tower of glass, invisible gates hinged on present and future, conditional, preterite perfect" (7). At this point, Gibson takes the cultural negotiation of corporeal extensions beyond the level of mere reflection. Sites of disability become sites of self-optimizing processes. Turner's neurologically interlinked socket serves his profession by providing him with additional abilities through the insertion of the respective

microchips. As in Western societies, the social and economic forces that drive the technological restoration of the body in the futuristic world of Gibson also lead to its enhancement. Thus, Gibson's corporeal extensions in the form of add-on prosthetic devices serve at least three functions. First, the satisfaction of a desire for the invariably feasible "cultural return to the land of the normative" is realized (Mitchell and Snyder, *Narrative Prosthesis* 8). Second, the promise of previously unimaginable degrees of restoration asserts the ultimate prevention from the expulsion into the "defective class." Third, the site of disability is transformed into a site of enhancement.

There are numerous minor characters that also use prosthetic profession-enhancing techniques. An actress, depicted in *Count Zero*, exchanges her eyes for a pair of augmented ones, suiting her profession and raising her market value: "She was both actress and camera, her eyes worth several million New Yen" (116).[88] In *Mona Lisa Overdrive*, we read that Mona, a sixteen-year old illiterate addict and prostitute goes through plastic surgery to look like simstim star Angie (144, 173, 174). The character of Danielle carries a "subdermal switch" for her implanted "recording gear" (186)—a useful enhancement for an interviewer. These forms of prostheses or modifications can be read as operating in service of neo-capitalist forces, rather than statistical averages causing a profound commodification of the body and a subjugation to normalizing power relations.

In her book *Körper 2.0*, Harrasser observes similar tendencies with regard to bio-medical technologies. In her discussion of the 2012 Paralympic Games, she illustrates how the cultural forces of productivity motivate strategies of self-discipline, self-conquest, and self-mastery. These tendencies have various effects on the construction of the "disabled-bodied" and increase the pressure on self-enhancement. As in the case of Oscar Pistorius and Aimee Mullins, amputation may be preferred to deformity because it qualifies as distinctly beneficial for technical improvement (18). Especially in the case of the athletes' "Flex-Foot Cheetah legs," hooked up to their knee joints, prostheses can offer an entry point into the corporeal system of interlocking units. This logic, however, bridges from the deficient disabled to the enhanced super-abled body without any in-between states prompting Harrasser to fill the gap with a new term. She counters the augmentative techniques prominent in contemporary neoliberal bio-techno-politics with the concept of the "parahuman" which explicitly incorporates the idea of extended embodiment.

The trajectory of prosthetic extension, from repair to rehabilitation and finally to self-mastery, results in self-optimizing processes that no longer rely on specific entry points of dysfunction but, in acknowledgement of an inherently fragmented body allow for the conquering of any possible part. Case's counterpart and iconic female heroine in *Neuromancer*, Molly Millions, is a "street samurai" hired by an AI named Wintermute to protect and support Case in accomplishing his mission (*Neuromancer* 30). Molly, however, is not a regular street warrior, but instead exhibits several corporeal enhancing prostheses. For example, "she held out her hands, palms up, the white fingers slightly spread, and with a barely audible click, ten double-edged, four-centimeter scalpel blades slid from their housings beneath the burgundy nails" (25). Apart from her technologized catwoman-like weapons, Molly is equipped with "lenses [of] empty quicksilver" which provide "a readout chipped into [her] optic nerve" (30, 32). In order to pay for the implemented techno-gear, Molly is

[88] Besides in the figuration of Molly Millions and her mirrorshades, Gibson's interest in eyes and the visual is played out in the short story "Burning Chrome" which features various ocular implants, such as "Sendai eyes" or "Zeiss Ikon eyes."

in constant need for money. A "cut-out chip" that disconnects consciousness from physical experience facilitates her part-time work as a "meat puppet" (147). Molly opts for prostitution until the market value of her enhanced warrior self alone is sufficient to sustain a living. Molly's prostheses are not material surrogates that compensate for an incapacity or failure in embodiment but augment her body, actualizing an improved self. No longer do her prostheses provide the material means through which she looks and behaves like a normal, able-bodied workingwoman. Instead, they are proof of power, self-conquest, and self-mastery—three characteristics that according to Harrasser, mark the commodified prosthetic body ("Superhumans-Parahumans" 1).

This development calls for an updated definition of "prosthesis." According to Margrit Shildrick, a prominent contemporary scholar in the field of disability studies, the *zeitgeist* of prosthetics has long changed: "where in conventional usage the term prosthesis has intended some material object that compensated for a perceived lack or failure in embodiment, the emphasis now has turned to enhancement and supplement." ("Border Crossings" 138). Kirby Farrell advocates the broadening of the term prosthesis to denote that "prosthetic extensions … enable us to overcome our physical limits" (*Post-Traumatic* 175). When pondering cheetah legs and wheelchairs, glasses and seeing-eye dogs, life support systems und nurses, one faces the blurring boundaries of the traditional definition of "prosthesis". Reflections on prosthetics splinter into diverging fields of substitution, repair, normalization, extension, enhancement, and self-mastery prompting us to reconsider the relation between man and machine:

> In changing our bodies to accommodate the use of machines, we change ourselves. In order to use a tool successfully, humans must incorporate that tool into their body image. Even without the physical invasiveness of 'socket' technology, our tools – our machines – become extensions of ourselves: 'The writer would be unable to type, the musician unable to perform, without the word processor or musical instrument becoming part of the body image. It is only insofar as the object ceases to remain an object and becomes a medium, a vehicle for impressions and expression, that it can be used as in instrument or tool (Grosz cited in Vint, *Bodies* 119).

While the first definition conceives of the prosthesis as a surrogate object meant to meet normative cultural requirements of appearance and functionality, the direction Grosz is pointing to foregrounds the prosthesis as a tool mediating via impression and expression between the human and its environment. This modified conception recognizes prostheses as extensions of the sensory system, and translocates the boundaries of the human further into the milieu. However, as the milieu enters the human to the same extent, their borderline begins to blur. Ratz's prosthetic hand becomes an external organ. Coded digital knowledge can be inserted into Tuner's head. A layer of quicksilver covering Molly's eyes translates information back and forth. What kind of a world is it that Ratz perceives through the impressions and expressions of pink rubber plastic, that Turner is able to articulate after the insertion of a language chip, and that Molly experiences via symbolic readout? These are extraordinary perceptions, extraordinary modes to access and interconnect with the world.

The Sprawl trilogy, as much as Gibson's other works, reflects corporeal extraordinariness in language. Experience is presented as inherently informed by

technological media as already underlined by the opening sentence of *Neuromancer*. "The sky above the port was the color of television, tuned to a dead channel" reveals the inversion of the relation between human perception and technological media (3). The narrator's perception of the sky operates within the scaffolding of televisual media. The sky above the port is not gray but it is instead perceived through the color's digital, televisual version. On that basis, the notion of "port" needs to be recognized in its polysemy of "haven" and its techno-related version of a "portal" to access the matrix. A similar logic underpins Turner's observation that, "Conroy's voice was flat and uninflected, as though he'd modeled it after a cheap voice chip" (*Count Zero* 10). The expectation that technology "comes second," that it is modeled on the basis of (human) nature is turned on its head. Kenneth Burke argues in *Language as a Symbolic Action* (1966) that, "the computer can't serve as our model" because "it is not an animal, but an artifact" (63). But, Evelyn Fox Keller observes in 1995 that, "it is the computer that dominates our imagination" (118). From the 1960s to the 1990s, there must have been a shift in the ways humans conceptualized human nature, in the terms and pre-conditions that were available to think about oneself. That change was the pervasive spreading of computer technology, moving from military facilities and offices, to homes, cars, and supermarkets. A fundamental change that Gibson foresaw, and maybe even spurred by means of his fiction. Paying attention to Gibson's use of language, including his frequent creation of neologisms, is significant because human beings are rhetorical beings.[89] Metaphor "is not just a matter of language," as George Lakoff and Mark Johnson famously claim, but instead "human *thought processes* are largely metaphorical" (6). Rhetoric not only constructs and constrains our thought, and thus our reality, but it is also a means of persuasion. Segal explains this notion in *Health and the Rhetoric of Medicine*:

> Persuasion is a central element in many medical situations. Patients may have to persuade physicians that they are ill and in need of care; physicians seek to persuade patients to adhere to courses of treatment; experts persuade the public to count some states and behaviors as pathological and others not; pharmaceutical companies persuade consumers to request their products, and physicians to prescribe them. Moreover, *the very terms in which persuasion takes place in health and medicine themselves condition outcomes* (1-2, emphasis added).

In this way, "[m]etaphor is a means, then, by which thought is structured and a means by which debate is, to some extent, determined" (119). By focusing closely on the language and rhetoric in which we talk, write, and think about the body we may realize the inherent power of these words. As a strategy of influence, the metaphors operative in medicine are usually below our radar. As long as the metaphorical and value-laden nature of bio-medical terminology remains hidden, it exerts the most power. On the topic of biomedicine, Laurence J. Kirmayer commented that, "[w]hen values are explicit, they may be openly debated but rhetoric uses metaphor to smuggle values into discourse that proclaims itself relational, even-handed and value-free" (57). Contrary to an understanding of scientific terminologies as neutral, there are "resident values in the most innocent-seeming locutions" (Segal 118). Pointedly Segal alerts us that, "the terms of a discourse constrain not only the outcomes of debate but

[89] See Jacques Derrida's *Monolingualism of the Other* (1998), and Derridian scholar David Wills, *Prosthesis* (1995).

also what it is possible to argue at all" (116). One of the three primary metaphors effective in bio-medical theory is *the body is a machine,*[90] which derives from a mechanical model of medicine. There is a prevalence of mechanical self-descriptions, such as "run-down," or "worn-out" (121). And many diagnostic systems are based "on the assumption that parts ought to work for the life of the machine" (121).

In addition to the inherent *the body is a machine* metaphor, the figuration of Angela Mitchell in *Count Zero* and *Mona Lisa Overdrive* displays narrative strategies akin to those present in contemporary medical discourse. Explaining her physical condition, Angie narrates how she was told that as a child she was "sick," that she was not "smart enough" (*Count Zero* 198). At one point an employee of hers is interviewed about her "congenital defect"—a question that is intended as a devaluating attack (*Mona Lisa Overdrive* 186). These diagnoses lay the groundwork for surgical interventions that in Angie's case neither had she given her consent to nor had she voiced any suffering or pain in the first place that may have called for such procedure. Her father implanted "things in her brain" that were supposed to make her smarter, but this invasive technology actually links her permanently to cyberspace (198, 256). Later we learn that Mitchell struck a deal with an AI, trading virtual access to his daughter for information on new technologies. Within the narrative, the alleged failure to meet the physical and psychological norm is used as a strategy to legitimize the modification of the child's body. This strategy of legitimation is common in the growing industry of "health services." Similar to Mitchell and Snyder's criticism of the body's status under neoliberalism (2015), Segal's analysis of the rhetoric of medicine lead her to the observation that,

> More and more, our identities are health identities. We think of ourselves as healthy or not, able-bodied or not—but also as fit or not, vegetarian or not, sexually "safe" or not, menopausal/andropausal or not. Some of us think of ourselves as cosmetically repaired and surgically altered or not. As we age, our hair (which is thinning), our teeth (which are yellowing), our bones (which are brittling), our eyes (which are failing) and our skin (which is wrinkling) are all sites of medical intervention, product promotion, and public information (20).

Without any explicit reference to disability studies issues, Segal's lines of argumentation time and again coincide with concerns brought forth regularly by disability studies scholars. For instance, when she quotes Robert G. Evans and Gregory L. Stoddart on the question of what determines health. Evans and Stoddart underscore the variety of "determinants of health" including social class, housing, income, education, and exposure to environmental agents. In an unknowingly disability activist voice, such position points straight to the social factors involved with health and disability and emphasizes their relevance rather than solely examining and pathologizing individual conditions. While such observations are articulated again and again in research, "health (care) policy takes almost no account of such elements" (123). Instead, health (care) policy is, "acutely sensitive to even the possibility that some new drug or piece of equipment or diagnostic procedure may contribute to health" (123). Evans and Stoddart argue for "a somewhat more complex framework" for health (care) policy, that takes accounts of a wider range of relationships among determinants of health (1349).

[90] According to Segal, the others primary metaphors are *medicine is war* and *medicine is a business.*

Gibson's literary style aims at what he refers to as "cognitive dissonance"—a characteristic that falls in line with the key characteristics of science fiction, which is, as Darko Suvin states in 1979, *the* genre of cognitive estrangement (*Metamorphoses of Science Fiction*). By means of various literary strategies reaching from microscale neologisms to de- and re- contextualization of terms, and the macroscale combination of specialized discourse with everyday language or slang. Thus, Gibson defamiliarizes the reader with what they know or what they assumed to know. In this way, Gibson's descriptions of extraordinary bodies destabilize common categories of the human body, and challenge dualistic registers of living and dead, natural and artificial, human and nonhuman, whole and fragmented, healthy and disabled, and their hierarchal order. Furthermore, over the course of his trilogies the acuteness towards the embeddedness of characters in relationships that determine their states of health, disability, and the overall extraordinariness of their bodies increases.

4.1.4 Cyberstatic Bodies

Approaching the question of how Gibson's depictions of the relation between the tool and the body, and the shifting boundaries of the human can be understood, I suggest that instead of relying on a truly cybernetic logic, they can be conceived of as what I call cyber*static*. "Where does the self stop and the tool begin? If a house or a piece of clothing functions as a shell, where does the self stop and the environment begin?," Farrell asks (*Post-Traumatic* 176). This conceptual expansion of the term transfers prosthetics from the limited site of "the disabled" to that of any human being. In 1929 Freud announced that, "[m]an has, as it were, become a kind of prosthetic God" (38-39). With reference to man's tool making abilities, Freud continues:

> When he puts on all his auxiliary organs he is truly magnificent; but those organs have not grown on to him and they still give him much trouble at times … Future ages will bring with them new and possibly unimaginably great advances in this field of civilization and will increase man's likeness to God still more (39).

Setting the tone between prophecy and metaphor, Freud invokes the superhuman as well as the cyborg. Echoing Freud, Farrell holds:

> We are virtuoso toolmakers, continually expanding ourselves through prosthetic engagement with the world. Although the word prosthetic usually signifies an artificial replacement for a missing or defective body part, I use the term to emphasize the ways tools and relationships make up for our creaturely limitations (*Post-Traumatic* 175).

The expansion of the term in line with Farrell proves fertile regarding the abundance and diversity of an organism's interdependence and interlinkage with a milieu consisting of human and non-human actors—a notion that will be particularly relevant for chapter 4.3 of this book. Farrell adds another layer to the notion of prosthetic relationships which he also sees between mother and child, servant and master. In stating that, "[p]rosthetic relations … can also be symbiotic and are grounded in biology and the basic operations of culture," Farrell pushes the conception of

prosthesis to its limit (175). In its fundamentality, his notion of the prosthetic nature of relationships brings to mind Humberto Maturana and Francisco Varela's concept of the structural coupling. In 1973, the two Chilean biologists formulate the first definition of autopoietic systems on the basis of living cells which they characterize has having inherent qualities of self-organization and self-maintenance. The autopoietic system is connected to its environment through mutual influence, and is fit to establish couplings of more intense and conditional nature with the milieu. Therefore, according to Maturana and Varela, the system does not further differentiate its environment. With Maturana and Varela in mind, Farrell's push of "prosthesis" to almost any kind of relationship (biological, cultural, familial etc.) is not a stretch—given the relationship is in some way conditional for the system.

Defined as a "cybernetic organism, a hybrid of machine and organism, a creature of social reality as well as a creature of fiction," Donna Haraway's cyborg appears to suit the new techno-realities and has become one of the conceptual emblems of cyberpunk fiction ("The Manifesto for Cyborgs" 7). Ultimately dissolving the boundaries between the human, the animal, and the machine and underscoring its constructed nature, Haraway claims that "[b]y the late twentieth century… we are all chimeras, theorized and fabricated hybrids of machine and organism" (8). Hence, not only "contemporary science fiction is full of cyborgs—creatures simultaneously animal and machine, who populate worlds ambiguously natural and crafted" but "we are [all] cyborgs. The cyborg is our ontology" (8). Thus, on the basis of the many other scattered, individual, and cracked notions of the cyborg in the discourse, Haraway is the first to put forward an explicit formulation of a long overdue concept. Her "argument for the cyborg as a fictional mapping our social and bodily reality and as an imaginative resource suggesting some very fruitful couplings" indeed, suggests new perspectives on human reality (8). "[A] cyborg world might be about lived social and bodily realities in which people are not afraid of their joint kinship with animals and machines, not afraid of permanently partial identities and contradictory standpoints" (13). Parallel to Gibson's fictional accounts, Haraway's theoretical trajectory is interested in the boundary breakdowns between animal, machine, and the (non-)physical environment in terms of which the human is usually defined. She thereby "suggest[s] a way out of the maze of dualisms in which we have explained our bodies and our tools to ourselves" (39). It is only on the basis of "The Manifesto for Cyborgs" that Molly becomes readable as a cyborg. For instance, Palmer recognizes Molly as being "stylishly at ease with her being a cyborg" (228). Additionally, Hayes claims that Molly's technological "modifications transform her into a dexterous cyborg warrior" (2). Despite Haraway's observation that already in 1985 "science fiction is full of cyborgs," her pivotal essay continues to stir ever new depictions of posthuman nature (8).

In contrast to Haraway's cyborg, the concept of the posthuman is even less contoured. For example, Badmington asserts at the end of his contribution to *The Routledge Companion to Literature and Science*: "There is, in conclusion, no convenient consensus when it comes to questions of posthumanism" (381). Countering humanist paradigms of the autonomous human being as the "hegemonic measure of all things," posthumanism no longer locates the human at the center and it disrupts firm and fierce distinctions "from animals, machines, and other forms of the 'inhuman'" (374). The notion that,

> the human being occupies a natural and eternal place at the very center of things, where it is distinguished absolutely from machines, animals, and other

> inhuman entities; where it shares with all other human beings a unique essence; where it is the origin of meaning and the sovereign subject of history; and where it behaves and believes according to something called 'human nature' (374)

leaves an outdated aftertaste. Due to a "theoretical and practical inadequacy – or even impossibility," humanism is disqualified as a "myth" and gives rise to its counter movement (374, 378). In order to grasp Gibson's innovative prose, figurations like the cyborg as well as the posthuman are indispensable, though not without pitfalls. As Haraway points out, owing to simplistic reductions of her conceptions, she has now abandoned the figure of the cyborg and devotes herself to animal studies. She states: "[s]till, human/posthuman is much too easily appropriated by the blissed-out 'Let's all be posthumanists and find our next teleological evolutionary stage in some kind of transhumanist technoenhancement'" (379). Owing to an often overt application of technological devices, "disabled" bodies have often been cross-referenced with Haraway's cyborg; a concept seductive to disability studies. A cyborg world, in Haraway's terms, is not (only) a world of humans depending on pacemakers and hearing aids but rather a world of carbon, bacteria, bicycles and alarm clocks interacting in feedback loops, and correspondingly constituting cybernetic organisms.[91] In this sense Molly Millions, *no more than any other character*, qualifies as a cyborg, and yet she has been the character most frequently associated with the concept.

That said, my notion of cyber*static* aims to highlight a lack in focus in Gibson's descriptions of bodies with respect to the nature of the coupling between organism and machine, how exactly control and communication are distributed between the two parties, what kinds of feedback occur, how the mutually formative powers of the agents operate. Only when figurations base on the specific nature of such interactions in some way, a conceptualization as cybernetic appears appropriate. Although the milieu of cyberculture suggests feedback loops and cybernetic self-regulation, there is as of yet little of the dynamism characteristic of cybernetics in the rigid organization of prosthetic bodies such as in Ratz or Molly. Despite the fact that bodies in the Sprawl trilogy display intimate relationships with (cyber)technology and descriptions of bodies hinge on machine terminology, descriptions clearly focus on individual states, rather than interactions. Exploring the boundaries of the human and the interaction with prosthetics, Gibson's figurations of extraordinary bodies build on a mechanical and bio-medical understanding of the human while leaving room for criticism of precisely that. In comparison to his later novels, Gibson pays little attention to the minute processes and interactions on both an individually corporeal and ecologically social level in the Sprawl trilogy.

[91] Yet, Disability Studies scholar Tobin Siebers remains very skeptical of the emancipatory potential of Donna Haraway's cyborg with respect to people with disabilities: "Prostheses always increase the cyborg's abilities; they are a source only of new powers, never of problems. The cyborg is always more than human – and never risks to be seen as subhuman. To put it simply, the cyborg is not disabled." (*Disability Theory* 63)

4.1.5 Disability as Punishment

At the outset of the novel, Case is presented at the low-point of his existence. As a highly talented hacker he lives in a tiny apartment in Chiba City located somewhere in the Sprawl, he frequents underground bars, and appears more like a petty criminal than a successful freelancer. The initial conflict of the novel arises when Case commits data theft and thus betrays his employer. His misbehavior is described as "the classic mistake" and met by a drastic consequence (5). Case is "[s]trapped to a bed in a Memphis hotel," where "his nervous system [is damaged] with a wartime Russian mycotoxin" and "his talent burn[s] out micron by micron" (6). The narrator concludes that, "[t]he damage was minute, subtle and utterly effective" in physically disabling Case to access cyberspace ever again (6). In the milieu of the Sprawl, the deprivation of the ability to jack in meant "the Fall" for the netrunner "who'd lived for the bodiless exultation of cyberspace" (6). Paradoxically, this bodiless bliss is expressed in corporeal terms, namely in a constant physical adrenaline high. The actual bodily harm done is twofold. On the one hand, Case is no longer able to savor the corporeal high, and on the other hand, he can no longer pursue his job as a netrunner. The severed relation that impedes Case's access to the matrix is between his nervous system and his deck. The deck serves as a prosthetic tool to overcome physical limits and extend one's embodied subjectivity into cyberspace. Without the capacity to access this mediating tool, however, Case cannot maintain his habitual experience of the world. This results in an impending disintegration of his entire system.[92] Case is described as "coming apart at the seams" and his limbs feel "cold and disconnected" (29, 68). His condition indicates the preliminary stage of his passive suicide attempt when Case tries "to con the street into killing [him] when [he is] not looking" (28). All there is left of Case is apparently a shallow container which, according to the societal value system, does not appear worth living. In the universe of the Sprawl, enveloped in the "constant subliminal hum" of business, "death [was] the accepted punishment for laziness, carelessness, lack of grace, the failure to heed the demands of an intricate protocol" (6, 7). On the basis of his vulnerable condition, Case is blackmailed into performing a particularly challenging hack by cunning Wintermute who promises to restore Case's nervous system in turn. Thereby, Case becomes the nodal point in an elaborate plot that culminates in the cosmic merging of two powerful disembodied artificial intelligences.

The literary strategy of depicting disability as a form of punishment and using it as a metaphor for doubtful morals is also used in the characterization of Slick Henry from *Mona Lisa Overdrive*. Slick is penalized for car theft by a procedure referred to as 'Korsakov's'[93] conducted in the "Chemo-penal unit" of prison (137). As a punishment for his ethically corrupt behavior, Slick is neurologically impaired in a way that keeps his short-term memory fading. Stress becomes a trigger for the syndrome's characteristic blackouts. The long-term memory is, however, unaffected by these episodes of short-term time loss which put Slick in a state of fear and confusion. After his imprisonment, Slick becomes an artist, lives reclusively in a

[92] This is typical trope typical of the cyberpunk genre; it is depicted "literally, in the persons of characters who undergo some kind of literal disintegrative experience" (McHale "Towards" 14).

[93] The Korsakov's syndrome actually exists under a slightly different spelling. Referred to as either Korsakoff's syndrome or Wernicke-Korsakoff syndrome, it describes a form of dementia, which can be observed during the last stages of severe chronic alcoholism. The syndrome entails the loss of memory for recent events while long-term memory stays intact. See Nelson Butters and Laird S. Cermak, *Alcoholic Korsakoff's Syndrome: An Information-Processing Approach to Amnesia* (1980).

place named after Andy Warhol's studio "The Factory," and builds large robotic sculptures.[94] In the course of the novel, he is hired to provide a hideout for Bobby Newmark (alias Count Zero) who is permanently "hooked up to pumps, and bags and tubes and some kind of simstim rig" and needs to be safely stored (13).

In line with the general observation made by literary disability studies scholars, that disability is often represented negatively, the depiction of Case, more than of Slick proves devastating. The description of the netrunner's incapacitation as his "Fall" not only indicates economic effects but evokes Biblical registers. The betrayal of his employer is presented as Case's original sin. Due to this disobedience, not to God but to capitalist conduct, Case becomes morally corrupted (i.e. he starts working as a hired killer). As a consequence, Case is expelled from the "Garden of the Able-Bodied" and his disability is presented as a punishment and an indicator of his culpability. In a mode of the technoromantic grotesque, Gibson portrays a psychodrama of sin, guilt, and redemption. While both figurations frame disability as a result of punishment, the major difference between them—already indicating a shift in Gibson's work—is that Case's disability drives the story in the form that the entire narrative revolves around his attempt to make up for his fault and the pursuit of the restoration of his ability to access cyberspace again. In the end, Case seems to succeed. As reward for his successful Straylight run, his nervous system is restored. By "overcoming" his disability, he not only is able to jack in again but may approximate a cultural ideal of success. As the narrator explains, "[Case] spent the bulk of his Swiss account on a new pancreas and liver, the rest on a new Ono-Sendai [a deck] and a ticket back to the Sprawl. He found work. He found a girl who called herself Michael" (270). While this resolution suggests a convergence with the normalistic ideal at first glance, Gibson's ending of *Neuromancer* is not without irony in the spontaneous enumeration of physical and social achievements. Finally, the resolution turns askew, and indeed ambiguous, when Case encounters a projection of himself next to his ex-lover Linda in cyberspace. This moment raises questions regarding the possibility of reaching any conclusive resolution of the body-mind dualism.

Instead of decisively perpetuating normalistic structures as Davis suggests happens in traditional novels, these two figurations seem to mock the normalistic imperative. Drawing on the close Socratic link between a healthy body and intact morals,[95] disability follows moral misbehavior in Gibson's figurations, which thereby taps into a long history of conceptualization of the "unfit" and "undesirables." However, in view of Gibson's overall work this link is already relegated to the background in *Count Zero,* and completely abandoned in the following trilogies.

Gibson's foregrounding of extraordinary characters resonates with what Mitchell and Snyder identify to be the employment of disability as "narrative prosthesis." Examining classical and contemporary works of literature and film, Mitchell and Snyder identify the ubiquity of disability as a common narrative motif. They hold:

> Disability provides a common formula for differentiating a character's uniqueness through the identifying features of physical and behavioral 'quirks' or idiosyncrasies. Yet, while disability often marks a protagonist's difference

[94] The figure of Slick Henry as a reclusive artist who makes cybernetic / robotic sculptures has been read as a reference to Mark Pauline and his Survival Research Labs (Markley, *Virtual Realities and Their Discontents* 100).
[95] See footnote nine of this thesis.

> and is the impetus to narrate a story in the first place, a complex disability subjectivity is not developed in the ensuing narrative (*Narrative Prosthesis* 10).

For example, in Sophocles' tragedy *Oedipus the King* disability serves as a metaphor of Oedipus' personal and social ruin which is, according to Mitchell and Snyder, grounded in materiality (10). At the same time, it is precisely the characters' extraordinariness that often provides the reason for telling a story in the first place and, thus, disability itself serves as an enhancement of the narrative. As a result of this observation, the core function of disability in many narratives is that of a narrative prosthesis. A crucial insight the two scholars provide for the current discussion is that "representations of disability tend to reflect the medicalized view that restricts disability to a static impairment entombed within an individual" (19).

The extraordinary bodies portrayed in Gibson's fiction constitute another salient example of the construction of disability in contemporary literature. The Sprawl trilogy features characters that by means of a "quick repair" are allowed a supposedly renewed convergence with the cultural norm of corporeal integrity and functionality (*Narrative Prosthesis* 8). Gibson's early fiction partly questions and partly endorses repair and self-optimization in order to facilitate the cultural return to the norm which reflects an underlying adherence to the bio-medical model of disability, is inclined to a mechanical notion of the human, and moreover reveals the characters' subjection to neo-capitalist forces.

What corresponds in many figurations of extraordinary embodiment, despite their different modalities of corporeal extension is their effect. Vint holds, "Molly…has had to modify her body in order to obtain employment in this extremely commodified world" (*Bodies* 108). Moreover, it is not a coincidence that Ratz pursues a profession as a bartender, where his prosthetic arm might circumvent muscular fatigue. Furthermore, Turner's status as a specialist can only increase with the advantage of unlimited skill updates. Gibson portrays modifications that, with reference to Davis' observation, "successful disabled people… have their disability erased by their success" all reveal the neo-capitalist logic of self-optimization (*Enforcing Normalcy* 9).

4.1.6 Technoromanticism

With respect to genre and the modes of representation in the Sprawl trilogy, Gibson draws on a repertoire of Romantic/Gothic tropes and symbolisms beyond the disabled body and translates them into the information age. Hackers like Case possess computer skills that are considered as mysterious arts in the way the Romantics thought of medieval alchemy or black arts; AIs inhabiting cyberspace are regarded as spooking voodoo gods; the setting involves ruins and the castles of dynasties in the form of abandoned spaceships; and we encounter the characters' doubles or read how they confuse their bodies and faces with those of dolls and masks.

Different from utopian technoromantic tales of transcendence, Gibson's technoromantic fiction actively complicates the role of the material body instead of celebrating its overcoming. According to Coyne, most digital narratives neglect the overall setting that allows a person's navigation though cyberspace, namely their body's entanglement in a "configuration of cables, satellites, transmitters, receivers,

computer processors, monitors, keyboards" (68). "Cyberspace narratives," Coyne criticizes, "commonly speak of being immersed in a virtual world while making only in passing reference to the materiality of the computer, the ergonomic environment, the clumsiness of the headset, or the inertia of the dataglove" (68). Instead, "the body in front of the machine becomes subservient to the abstract system, the logic diagram, the utopian vision" (68). On the contrary, the Sprawl trilogy pays attention to the involved objects, and their limiting as much as enhancing relation to the body. The role of the body in relation to the attached computer is increasingly in focus over the course of Gibson's novels arriving at a depiction of Flynne Fisher in *The Peripheral* which incorporates both the sensory experience of the material body and the experience of the virtual avatar by intertwining them. Flynne "Took the jerky out of her mouth, put it on the table. The bugs [i.e. drones in the game] were back … Her free hand found the Red Bull, popped it. She sipped" (14). Consider also: "Back around, the bugs were already bobbing, waiting. She flew through them, making them vanish. Tongued the cud of jerky away from her cheek and chewed. Scratched her nose. Smelled hand sanitizer. Went after bugs" (22). In anticipation of Gibson's latest works, I underscore that the body's materiality and particularly its sensorium come to play an increasingly significant role.

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My discussion of Gibson's Sprawl trilogy crystalizes how identity is fundamentally conditioned in one or another way on bodily extraordinariness foregrounding the significance of corporeal extension. While depictions of disability tend to follow the logic of the medical conception of prosthesis, which yields to the restoration and enhancement of the body, I have emphasized how Gibson examines the demarcation lines of the human body and complicates common notions of normality and humanity. As I have argued, characters offer resistance to the vision of overcoming their physiological apparatus instead of aiming for transcending it via new technologies.

The narrative perspectives in the novels illuminate how the characters' ascription of or self-identification with disability is far from clear, despite the fact that according to medical rubrics their physical, physiognomic, and psychological conditions are clearly non-normative. Thereby, if protagonism is at least to some degree propaganda, Gibson's fiction offers an exploration into "disability subjectivity." Thus, narratives question the normalistic complex, and provide a chance to reflect on the implications of common notions of disabled and non-disabled bodies and minds. In this way, Gibson's fiction is compatible with a category of novels that Mitchell and Snyder's classify as "antinormative novels of embodiment."[96] Gibson's novels deviate from traditional literary formulas in many ways: be it that a supremely scarred and maimed character never turns out to be the villain of the story, that almost all main as well as side characters have some kind of abnormal corporeal feature, or that the narrative structure of most novels is non-linear with regard to time and place and alternates narrative voices. As the following chapters show, Gibson refashions this logic in resonance with cognate developments in disability studies.

The wide-ranging criticism of the mechanical model of medicine and by extension of the (disabled) body, evokes the question of how else we might conceptualize the human body. In what other ways, terms, and pre-conditions could the human body be understood? How do we deal with the fact that historically grown social structures, practices and metaphors cannot always simply be exchanged for new ones? On the theoretical level, disability studies scholars have countered the

[96] See chapter three of Mitchell and Synder's *Biopolitics of Disability.*

hegemony of normalcy by conceptualizations that account for the historical and socio-political factors and power relations of modern Western societies. On the artistic level, depictions of disability are reevaluated while new representations by nondisabled, as well as disabled artists, begin to emerge.

4.2 The Body and Society: The Bridge Trilogy

This chapter interrogates the shift from discrete to interrelated, from virtual to material, and from a rehabilitation of the body to a rehabilitation of mindset in the depictions of extraordinary embodiment within the Bridge trilogy and alongside the historic-political changes of the concept of disability of the 1990s in the U.S. and the U.K. This analysis of literary characters will be intersectional where the material demands it due to the problematic interlocking of identity categories. Thus, my analysis does not follow an anticategorical approach but instead takes the opportunity to reflect on disability in relation to race and gender. A staple characteristic of Gibson's globalized universes is the irrelevance or liquidation of governmental structures and instead the rule of oligarch families, advertisement companies, fashion brands, and mafia groups. With this in mind, I offer a critique of the propositions and regulations of the legal system or the body politic particularly with regard to disability that is neither comprehensive nor conclusive. Moreover, this chapter focuses on the attitudinal barriers as part of social model criticism and implicit in the figures confronted with extraordinary bodies in the novels. Oftentimes too elusive or tacit to be grasped, ableist attitudes manifest in interpersonal interactions and are arrested in the literary form, allowing for a detailed examination of otherwise fleeting instants.

4.2.1 Social Toxicity

LA PURISSIMA

As my discussion of the figuration of Zona Rosa illustrates, the Bridge trilogy initiates a shift in focus and overtness in negotiating the extraordinary body. Cyberspace offers the potential to be somebody else, which in turn reveals the inner struggles characters have in their lives offline. Focusing heavily on the figure of Mercedes Purissima (who is mostly referred to by her avatar name Zona Rosa), a Mexican girl whose disability is revealed at the end of the novel, shows how these inner struggles are related to the characters' own extraordinary embodiment as much as to their social environment.

Mercedes Purissima and her friend Chia are members of a virtual clique of teenage girls who share the same taste in music and engage in their fandom as members of the online fan club of their favorite band Lo/Rez. Nonetheless, Zona Rosa is an outsider figure due to her rough, aggressive attitude, her constant threat of force, and her slang vocabulary. In conversations about their real lives, Zona Rosa prides herself on being "the leader of a knife-packing *chilanga* girl gang. Not the meanest in Mexico City, maybe, but serious enough about turf and tribute" (12). Explaining to her friends that they, "would not last an hour, in [her] world," Zona frequently stresses her difficult living condition (110). In order to get some quiet and (at least) virtually away from the perilous milieu of Mexico City, Zona Rosa squats at an abandoned website which she transforms into her very own personal space.[97]

[97] Conceiving the avatar name "Zona Rosa" in this context as a reference to Mexico City's neighborhood of the same name produces dissonance between the girl's secret unpopulated place and the real vibrant neighborhood that is busy with tourists, and known for its diverse communities, nightlife, and street culture.

Only in the denouement does Chia learn from another character about Zona Rosa's actual identity. When in the course of events Chia's life is threatened, Zona Rosa reveals her virtual identity and her secret website. This results in a sacrifice of both her avatar, as well as her secret hideaway in order to save her best friend's life. As a character explains to Chia, "she had exposed her presence in her website. The original owners became aware of her. She abandoned her site. They pursued her. She was forced to discard her persona" (285). This final demystification of Zona Rosa's offline character entails the revelation of her as the "victim of an environmental syndrome" that caused severe deformations (285). The exact environmental causes and the nature of the deformities remain unclear. Chia is told that due to her physical disability, her friend has lived for the past five years in complete denial of her physical self. Hooked to a deck, cyberspace is depicted as the last resort to escape her intolerable corporeality. Cyberspace becomes her prosthesis and provides a substitute for her perceived physical deficiency. With this in mind, the violence and sensitivity towards the topic of physicality in some of Zona Rosa's previous statements comes into a different light.

> 'We must *attack*,' said Zona Rosa, punctuating it with a quick shift to Aztec death's-head mode." … Passivity is death … '*You*,' said Gomi Boy to Zona Rosa, 'are in Mexico City. You are not physically or legally endangered by *any* of this!' 'Physically?' said Zona Rosa, snapping back into a furious version of her pervious presentation. 'You want *physically*, son of a bitch? I'll fucking kill you, physically! You think I can't do that?' … The saw-toothed, dragon handled switchblade was out now, quivering, in front of Gomi Boy's face (219).

Such revelation of a disabled figure falls into a common formula for the depiction of disability in narratives. In a first single-axial observation, Zona's story appears as a tragic biography structured along the lines of passivity, shame, exclusion, isolation, and finally compensation through a virtual prosthesis. The attribution of an existence not worth living meets the redeeming promise of new technologies. The avatar becomes the prosthetic substitute for the real deficient body. Moreover, this common strategy includes the fact that the disabled support character saves the life of the normal protagonist or facilitates some kind of realization or progress in their development. Narrative strategies of this sort are well known in literary disability studies and extensively discussed in the work of, for instance, Garland-Thomson, Mitchell and Snyder, or Cheyne.

When considered from a perspective immanent to Gibson's work, the depiction of Mercedes Purissima's extraordinary body can be read as a counterpart to Case—the protagonist of *Neuromancer*. The descriptions of their respective extraordinary bodies strongly rely on a religious theological register, which in the case of Mercedes Purissima begins with her name. In Spanish, "Mercedes" is the equivalent of "Maria." Furthermore, the middle name "Purissima," despite denoting the superlative of "pure," is most commonly used to refer to the Virgin Mary: La Purísima. Zona Rosa's actual name thus connotes *the* Catholic female figure known for immaculate conception, or conception free from sin. By revealing Zona Rosa at the very end of the novel as the unblemished Mercedes Purissima who suffers from severe physical disabilities, Gibson (unlike in his depiction of Case), does not attribute the character's physical condition to sin or misbehavior. On the contrary, the cause of her deformities lies in an obscure "environmental syndrome." Locating the

source of disability outside the organism not only highlights a shift in perspective on disability within Gibson's work but, moreover, resonates with a conceptual transformation in academic negotiations of disability.

Gibson's shift in the attribution of responsibility from the individual to the environment parallels the conceptual shift from the medical to the social model of disability, which claims social and economic factors being fundamental in the construction of disability. Far from denying "the reality of impairment [or] its impact on the individual," the internationally recognized social model of contemporary society intends to "challenge the physical, attitudinal, communication and social environment to accommodate impairment as an expected incident of human diversity" and to further unmask "disability" as a social construction (People With Disability Australia par. 1). It is especially "the disabled body [that] provides insight into the fact that all bodies are socially constructed—that social attitudes and institutions determine far greater than biological fact the representation of the body's reality" ("Disability in Theory" 173). Siebers continues that "[d]isability exposes with great force the constraints imposed on bodies by social codes and norms" (174). Vint points out, "[b]odies which resist disciplining themselves to cultural norms challenge the field of the culturally intelligible" (*Bodies* 19). In light of Davis' investigation of normalcy, it is not difficult to observe that these bodies are constructed to resist, and in turn enforce the hegemony of normalcy. On this note, Gibson's depiction of Mercedes Purissima allows a reading of her deformities as not disabling in themselves. Instead, it is their deviance from social norms that establishes barriers. In other words, Mercedes does not suffer from her intolerable corporeality but from an intolerant environment.

While a literal reading of "environmental syndrome" points to unspecified deformities induced by physical toxicity, I suggest reading environmental syndrome in the sense of Vorrasi and Garbarino's concept of "social toxicity." Considering children's social environment rather than their DNA, psychologists Vorrasi and Garbarino developed the concept of social toxicity when studying the causes for violence in children. Social toxicity indicates, "the degree to which the social world has become poisonous to a person's well-being" (61). They elucidate:

> The term was originally offered as a parallel to the environment movement's analysis regarding *physical* toxicity as a threat to human well-being and survival … In the matter of recognizing, understanding, and reversing social toxicity, however, we lag far behind. But what are the social equivalents to lead and smoke in the air, PCBS in the water, and pesticides in the food chain? They include community violence, child abuse, domestic violence, family disruption, poverty, despair, depression, rejection, paranoia, alienation, and other social pollutants that demoralize families and divide communities (61).

This analysis of social toxins reveals how nobody is immune to its effects and yet, while accepting vulnerability as a basic human condition, Vorrasi and Garbarino emphasize that, "vulnerability varies cross-sectionally" (61-2). Children and adolescents, belonging to particular social groups, "face an accumulated pattern of developmental risk factors" which produces a "synergistic effect" (62). Violence is understood as an effect, not a character trait that can be approached by taking account of the single factors that feed into its occurrence. In tracing the individual factors that inform violent behavior in the lived experience of a child, this psychological approach already, albeit tacitly, operates on an intersectional framework. While the ominous

environmental syndrome associated with Mercedes Purissima's deformities suggests a poisoning by physical toxins, the devaluing meaning towards her body derives from social toxins.

DISENTANGLING RACE AND DISABILITY

Starting from the analysis of her extraordinary body, the figuration gains another layer of complexity once the matter of race and the historical entanglement of race and disability as structural categories are taken into consideration. In the figuration of Zona Rosa/Mercedes Purissima, Gibson taps into the complex history of interlocking categories of disability and race in the North American context. Needless to say, there has been a long-standing struggle with regards to the specificities of the formation of these categories. In this particular case, Gibson's depiction of disability is doubly subversive. First, disability is not portrayed as an inherent individual trait in a simplistic fashion but instead entertains the idea of the formative impact of environment (as vague as it may be). This depiction breaks with the tradition of essentialist, biology-based representation of disability, as well as race, in that it shifts the focus towards the force of the physical and interpersonal milieu. This shift becomes even more significant for a Mexican-American context, since the process of racialization brought about the re-essentialization of disability in the sense of an inferior physical and mental shape.[98] A type of entanglement that in its interdependency has contributed to inequality and exclusion. In Mercedes Purissima we find a shift in focus regarding the locus of disability, as well as a conceptual disentanglement of the categories race and disability. While Mercedes Purissima's deformations are caused by environmental toxicity, her disability is caused by social toxicity. In 2017, *The Guardian* reported that despite huge grievances in terms of accessibility, infrastructure, and health insurance the biggest problem people with disabilities face in Mexico City today is a social toxin: attitudes. The author recounts,

> All of them [wheelchair users] describe a culture of *pobrecito* ('you poor thing') in which wheelchair users are pitied, and assumed to be incapable of supporting themselves. As a result, many spend most of their lives in their parents' homes, which can quickly become a prison. On the street, wheelchair users say they often receive unsolicited blessings – but they are also regularly shunned by those on two feet (par. 19).

This newspaper article illustrates the lived experience of disabled persons in Mexico City. In fiction, the figuration of Mercedes Purissima outlines similar consequences of living with a disability. The character is depicted as living in isolation, imprisoned in her own home, and anxious of people's reactions to her deformed material body. A body which she can, therefore, only deny and "live" instead in the virtual reality of cyberspace. The article furthermore emphasizes the importance of support groups and solidarity on a local level. The author, Noah Lanard observes that, "policy advocacy is a secondary concern; instead they teach wheelchair users to thrive in Mexico City as it exists today, buckled pavements and all" (par. 21). The support groups s/he introduces focus strongly on teaching a self-reliance that is a sort of relational autonomy—autonomy that emerges from supportive relationships, or as interviewee

[98] Consider the historical conflation of these identity categories in chapter 2.2 of this book.

Abraham Plaza says, "it makes you realize how much this alliance has helped" (par. 28). Only in a few instances, does the Bridge trilogy feature the idea of relational autonomy (rather than dependency), whereas the Bigend trilogy grants it center stage.

THE INFINITE POSSIBILITIES OF THE AVATAR

From the afflictions associated with her corporeality results the rejection of her material body and the embrace of a virtual avatar, which promises unconditional design options. However, the infinite possibilities self-projection offers vis-à-vis virtual reality do not exclusively pertain to those deemed "obvious" cases of non-normative embodiment, but also to the protagonist Chia's assumingly normal (because uncommented) physique. Without any evidence to the contrary, readers imagine the protagonist as supremely normal (i.e. able-bodied and able-minded).

Virtual reality is a viable alternative space for Chia as it provides the space where the teenager meets her international friends, fulfills fan club duties, and even inhabits a virtual version of her actual room. The influential status that cyberspace occupies in Chia's life is underlined by her mother who, "felt that Chia spent entirely too much time gloved and goggled" (15). When constructing her avatar, Chia reverts to cosmetic prosthesis in order to meet the idealized statistical norms of beauty: "Chia herself was presenting currently as an only slightly tweaked, she felt, version of how the mirror told her she actually looked. Less nose, maybe. Lips a little fuller. But that was it. Almost" (12). Chia is constantly checking "how she [is] presenting … put a nudge more depth into her lips" (97). The promise of a disembodied existence becomes fundamentally inverted. Instead of the transcendence of the body, normative perfection is achieved by the reproduction of Western ideals of beauty. "In a society in which appearance is the primary index of value for women (and increasingly for men)," Garland-Thomson states, "beautification practices normalize the female body and disabilities abnormalize it" (*Extraordinary Bodies* 28). While in the Sprawl trilogy virtual representation takes the shape of geometrical forms, the Bridge trilogy critically negotiates cyberspace's prophetic function to free the mind from the body by portraying it is undermined by its users. In accordance with Vint, "cyberspace is …the space where the perfect body is paradoxically acquired through an annihilation of the flesh" (*Bodies* 103). The deceptive function of virtuality comes to light in the regress to cosmetic enhancement. Therefore, computer technologies, "actually tend to reinforce stereotypical notions about the body, gender, and beauty rather than free the subject from the restrictions of 'meat' judgments" (105).

In contrast, despite the denial of her body, Mercedes Purissima does neither turn to virtual reality in order to escape nor compensate for her condition. Whereas her female friends use the infinite possibilities of presentation in cyberspace for self-optimization, Mercedes Purissima actively and creatively resists the normalizing forces of society. Instead of generating a normal, average, or perfect static surrogate body image in the form of an avatar, she varies her virtual gestalts, and presents herself as sometimes more and sometimes less human. Once as an assemblage of flickering fragments, never entirely in focus, always in low resolution:

> Zona in her ragged leather jacket over a white t-shirt. In that place she presented as a quick collage, fragments torn from films, magazines, Mexican newspapers: dark eyes, Aztec cheekbones, a dusting of acne scars, her black

> hair tangled like smoke. She kept the resolution down, never let herself come entirely into focus (*Idoru* 109).

In *Idoru* (and by extension the Bridge trilogy), Gibson avails himself of the possibilities the genre offers in the exploration of new corporeal conceptions and potentials for those located outside the norm. The deck serves as prosthesis for interaction and interconnection with others, which Mercedes is denied in non-virtual cultural spaces. She seeks extension and connection without the overcompensation of functional superiority or cosmetic augmentation. The deck neither leads to Mercedes Puríssima's normalization nor to an enhancement of her abilities.

In addition to channeling her creativity into her avatar design, Mercedes Puríssima creates her own website, a hideout where she finds refuge. As the only one privy to this secret place, Chia is allowed to visit and recounts:

> Zona Rosa kept a secret place, a country carved from what once had been a corporate website. It was a valley lined with ruined swimming pools, overgrown with cactus and red Christmas flowers. Lizards posed like hieroglyphs on mosaics of shattered tile. No houses stood in that valley, though sections of broken wall gave shade, or rusting rectangles of corrugated metal set aslant on weathered wooden uprights. Sometimes there were ashes of a cooking fire. She kept it early evening there (109).

In parallel with the design of her avatar, Zona Rosa actively and creatively crafts an environment that is not sleek or luxurious, but the projected materials distinctively carry a history of their own. That is to say that the materials depicted are not as new, shiny, and smooth as in traditional science fiction. Instead, materials are corrugated, dented, cracked, or weathered.

> Zona snapped her fingers and a lizard scurried from beneath a rock. It ran up her leg and into her waiting hand. As she stroked it with the fingers of the other hand, the patterns of its coloration changed ... Zona Rosa took a knife from her jacket pocket and squatted on a shelf of pinkish rock. Golden dragons swirled in the shallow depths of the knife's pink plastic handles. She thumbed a button of plated tin and the dragon-etched blade snapped out, its spine sawtoothed and merciless … Zona picked up a length of green-barked branch and began to shave thin curls from it with the edge of the switchblade (110).

The descriptions of Zona Rosa bring to mind another strong Mexican woman who used to portray herself in the midst of items from flora, fauna, and Mexican paraphernalia. Frida Kahlo's work as a painter and feminist is not only highly influenced by the *Mexicanidad* movement, which opposed colonialist thought of cultural inferiority of Indigenous cultures, but also by her health condition. As a child, Kahlo contracted polio, which made her right leg shorter and thinner than the left. As a teenager she was injured in a severe traffic accident, which caused multiple fractures to her spine, collarbone and ribs, a shattered pelvis, broken foot and dislocated shoulder. In between operations and while recovering in a body cast, she began to focus heavily on painting (Souter, *Kahlo* 2011). Her physical and emotional life experience, pain, and passion became dominant themes in her work, which to a large degree consists of self-portraits. Consider the depiction of her medicalized body in the paintings *Henry Ford Hospital* (1932), *The Broken Column* (1944), and *Self-*

Portrait with the Portrait of Doctor Farill (1951). A term that has been used to describe her portraits, and by extension Kahlo herself is "jolie laide" (French, meaning "the beautiful ugly") and was meant to describe her 'unconventional' beauty. Kahlo's work has been understood to vindicate the unique beauty of imperfection by means of portraying individual flaws or deformities. The literary depiction of Zona Rosa as a disabled female figure amidst Mexican paraphernalia shares Kahlo's aesthetics of extraordinary embodiment; consider *Without Hope* (1945), *Self-Portrait with Thorn Necklace and Hummingbird* (1940), and *Girl with Death Mask* (1938).

At other times, Mercedes Purissima retreats from human resemblance altogether and appears as a "blue Aztec death's-head burning bodiless, ghosts of her blue hands flickering like strobe-lit doves … Stylized lightening zig-zag rose around the crown of the neon skull in deliberate emphasis" (11). In those passages, the avatar re-enacts the composition of Frida Kahlo's paintings in pixelated virtual form. While at the end of *Neuromancer*, no one stays unrehabilitated, in *Idoru* Gibson more affirmatively begins to explore the forms and potentials of extraordinary corporeality. All these avatars contain some sort of negation of the lived identity as disabled Mexican woman and yet there is no (over-) compensation in the sense of disciplining the body into fitting a normalizing visual regime. Rather, Mercedes Puríssima embraces a fluid, dynamic, and ambiguous identity. Thus, actualizing a figuration that matches Garland-Thomson's criticism of formulaic and one-dimensional representations of people with disabilities:

> Even though the prototypical disabled person posited in cultural representations never leaves the wheelchair, is totally blind, or profoundly deaf, most of the approximately forty million Americans with disabilities have a much more ambiguous relationship to the label. The physical impairments that render someone 'disabled' are almost never absolute or static; they are dynamic, contingent conditions affected by many external factors and usually fluctuating over time (*Extraordinary Bodies* 13).

WHOSE VOICE IS HEARD?

What has been neglected in discussions of cyber-human, post-human, and material bodies in Gibson's work, with or without an explicit consideration of disability, is the aspect of literary perspective whose consideration occasions a re-evaluation of the extraordinary figure in Gibson's work and simulates alternative visions of extraordinary bodies on the conceptual level. While cyberspace is depicted as a means to build alliances, friendships, and community, it simultaneously reveals the real-life rejection, exclusion, and segregation of people with disabilities. Upon learning about Mercedes Purissima's circumstances, Chia felt "her friend hadn't even really existed, and there was this other girl in Mexico City with terrible problems" (290-1). In the aftermath of the events, Chia articulates her desire to contact Zona Rosa because she is her best friend and saved her life, and because "Zona would understand" (282). However, her request is countered by the advice that "it was better not to try to reach her now" and that "she [Zona] would not wish this" (282, 285).

I read these final interactions as an invitation to reflect not so much on disability itself, but rather on the casual conversations that negotiate how to deal with people with disabilities. While these reactions at first appear to be caring and sensitive towards Mercedes Purissima's living situation, their ethical implications and real-life

consequences are effectively exclusive. The girl's deformed body appears as a blatant violation of physical norms resisting the disciplinary forces of culture, which is met with the avoidance of direct interaction. Finally, Chia is told that, "the girl in Mexico City, more than anything else, needed to be somebody else" (291). That Mercedes Purissima has terrible problems and needs to be somebody else is not a value judgement she herself makes but rather the impression she gets from the other, non-disabled characters. After all, there is no neutral or objective narrator to depict Mercedes Purissima's perspective on her living situation. Indeed, the story is told through a fictional non-disabled character's perspective. Thus, my conclusions rely strongly on the narrative situation of the novel.

I argue that the depiction of Mercedes Purissima not only challenges common notions of extraordinary embodiment with regard to disability, and the interlocking of disability and race, but also ultimately calls into question common attitudes towards disability. Here, the negotiation of how to interact with a disabled person takes place without that person's involvement. Perceived as a tragic deficiency, the characters' reactions unmask the cultural taint of otherness that, as I argue, might be Mercedes Purissima's reason to seize an avatar in the first place. Driven by pity and supposed empathy, these casual statements feed into a stigmatizing practice of disenfranchisement. Mercedes is deprived of her right to participate in a diverse social group between different races and physiques. Her voice is not present in the discussion of how to converse with people with disabilities.[99] Tacitly discriminatory attitudes translate into concrete exclusive realities, be they material, economic, political, or interpersonal. Their interaction is limited to the virtual realm where embodiment is secondary. In *Idoru*, Gibson tackles attitudinal barriers, which due to their invisibility are usually hard to grasp. The novel offers a reading of extraordinary embodiment as not limiting in and of itself but additionally examines how interpersonal interactions can prevent social participation. Mercedes does not only suffer from an intolerable environment that manifests in the form of an environmental syndrome, but also from social toxicity.

The concealment of Mercedes Purissima's "true" corporeality on the diegetic level engenders the readers' ignorance about her physical condition. I call this mimetic form of narration "narrative repression" as it parallels the mechanisms of social repression of people with disabilities from the visibility of public spaces. Should she meet Mercedes Purissima's new avatar online, Chia was still not allowed to tell her that she "knows" about the unspeakable (291). At first glance the figuration can be read as an overcoming of personal tragedy via the adoption of virtual identities. However, Mercedes Purissima does not readily fit the binary of the disabled body in its literary depictions of either suffering or overcoming, "at best, wanting, and, at worst, humiliating" (*Narrative Prosthesis* 18). Rather, Gibson's portrayal of this disabled Mexican woman testifies to occasions of ambiguity, forestalling hasty unequivocal attributions of reclusiveness, defeat, and tragedy. It is not the biological reality that provides the grounds for this representation, but the individual characters' interpretations of that biological reality.

In laying the emphasis on the manifold constitutive forces of the social environment in the literary representation of a disabled Mexican woman, rather than on biology and heredity, Gibson re-fashions the historical-political perspective on that particular social group. Nevertheless, a critique of the figuration of Mercedes

[99] To counter disenfranchisement in society the disability rights movement has taken "Nothing About Us Without Us" as one of their main slogans since the 1990s.

Purissima is valid in so far as it—as so many narratives—misses a chance to give a voice to this particular social group.

A prominent spearhead in giving a voice to Mexican and Mexican-American women and raising awareness of their living situation is scholar and activist Gloria Anzaldúa. In her semi-autobiographical book, *Borderlands/La Frontera: The New Mestiza* (1987), Anzaldúa draws on chicana/o cultural theory, feminist theory, and queer theory when discussing the social marginalization that arises from structural categories, such as race, class, and gender. Anzaldúa's discussion can easily be extended by the category of disability. With regard to the interrelationship of attitudes, attitudinal barriers and social change, Anzaldúa illuminates:

> The struggle is inner: Chicano, indio, American Indian, mojado, mexicano, immigrant Latino, Anglo in power, working class Anglo, Black, Asian--our psyches resemble the bordertowns and are populated by the same people. The struggle has always been inner, and is played out in outer terrains. Awareness of our situation must come before inner changes, which in turn come before changes in society. Nothing happens in the 'real' world unless it first happens in the images in our heads (*Borderlands* 85).

In this sense, the struggle for disability rights and more realistic representation of disability is an inner one. Gibson offers such figurations and images of disability to our cultural unconscious, even more so in the Bigend trilogy.

By means of an intersectional reading it becomes clear that Gibson's literary depiction does not dissolve the categories of race and disability, but first disentangles them. Initially marked through the category of race, the final revelation of disability changes the entire figuration, demanding a re-evaluation of the character by accounting for the categorical interdependencies. In this way, *Idoru* offers a figuration that invites us to re-think the extraordinariness of bodies exemplifying how literature as a medium can help make invisible attitudes tangible and thus raise awareness of a mainly invisible problem. A literary strategy that provokes such internal negotiation of disability and re-evaluation of extraordinary embodiment in the reader is the final revelation of a character's disability at the end of a narrative thus prompting the question of how and why such revelation changes the overall meaning of a character.

4.2.2 Towards Materiality

VISCERAL APPEAL

Besides the fact that the Bridge trilogy focuses most heavily on characters' interlinkage with the environment on an attitudinal as much as interpersonal level, there is another shift in focus: away from virtuality and towards materiality. As seen in the avatar designs, the promise of a disembodied existence becomes fundamentally inverted. Instead of the transcendence of the body, immaterial normative perfection is achieved. Despite buying into the optimization strategies provided by technological programs, Chia expresses a clear preference for materiality. The virtual reproduction of her room is not granted the same appreciation despite the infinite possibilities regarding design, structure and texture. Entering this virtual space makes her feel "disappointed" and "somehow … it made her homesick; made her miss the real thing" (*Idoru* 33). This nostalgia for the "real thing," I suggest, indicates nostalgia for the

material thing. This vigorous preference for corporeal experience snatches the appeal from cyberspace revealing its cheap simulation. Instead, the "visceral appeal" that surfaces ever so slightly in the Sprawl trilogy comes into effect in the Bridge trilogy (*Count Zero* 133). Surely, Chia would not opt for a permanent disembodied existence in virtual reality.

FROM LIGHT TO MATTER

The primary subject matter of *Idoru* and *All Tomorrow's Parties* is the relation between the material and the virtual and the possibilities of their coupling. Arranged as the prospective marriage between the mega rock star Rez and as the idoru Rei Toei raises the question of how the embodied Rez and the disembodied Rei Toei, the biological and the synthetic, can be united. Their different modes of existence are mirrored in their names. Rei Toei as the homophone of "ray toy" designates her synthetic and projective nature. Rez, on the other hand, resembles the Latin "res" and denotes a physical substance, matter, or thing.

Significantly more complex than an average computer simulation confined to the matrix, Rei Toei is a being of light, and appears as a full-color in-space projection, thereby penetrating material space and even interacting with her human and non-human environment. Her virtual being consists of "a congeries of software agents, [and is] the creation of information designers" who constructed her as "an array of elaborate constructs that [is referred] to as 'desiring machines' … *aggregates of subjective desire* … an architecture of articulated longing" (92, 178). Intrigued by the ever-spinning software agents and desiring machines, Gibson begins to intensify his interest in the processual character of systems: "Rei's only reality is the realm of ongoing serial creation … Entirely *process*" (202). The idoru embodies another shift in Gibson's work; a shift in focus from integrative corporeal schemes that necessitate the underpinnings of fragmentation and supplement, to the processes of on-going becoming. Laney says, "how nothing is perfect, really. Nothing ever finished. Everything is process (*All Tomorrow's Parties* 13)

In retrospection on the Sprawl trilogy, Rei Toei differs fundamentally from artificial intelligences like Wintermute and Neuromancer. It was the technology of cyberspace that was developed in and came to characterize the Sprawl books. In this spirit, the pursuit and successful accomplishment of the merging of the two virtual entities in *Neuromancer* is entirely bound to the realm of cyberspace. At no point did obtaining a physical body appear desirable to the AIs. In the Bridge trilogy, however, the novum is nanotech: a technology that allows the manipulation of matter on an atomic scale. In the novels, nano-assemblers and nano-faxes serve as translators from the virtual to the material, as an interface between the human and the computer. On a conceptual level, nanotechnology bridges the gap from virtual cyberspace of the Sprawl trilogy to the material reality of the Bigend trilogy.

Since Rei Toei does not fully convert to a physical existence in *Idoru*, for the time being their marriage takes place on a symbolic level. In their functions as media stars, both have generated big data whose intersection in the matrix and the resulting data pattern metaphorize their marriage. "Rez exists as thoroughly, in the realm of the digital, as it is possible for a living human to exist," and yet *All Tomorrow's Parties* declares that a union with "Rez-the-icon" instead of "Rez-the-man" is not satisfying to either of the partners (55). Despite his willingness "to go there, literally, to go

where Rei Toei is … join her in some realm of the digital or in some not-yet-imagined borderland, some intermediate state," he failed to fully "virtualize" (55).

Nanotechnology as a yet unthought-of option of corporealization is cause for, and effect of, Rei Toei's longing and reaching out for material embodiment, which is eventually met in *All Tomorrow's Parties.* Thus, the celebrated union of the virtual and material is thwarted in favor of the body. The option of uploading Rez's subjectivity in the sense of him becoming disembodied in order to obtain a union in the virtual realm is not entertained at all.

The trilogy's climax is reached when the idoru finally materializes from a virtual being into an embodied self. Her manifestation prompting science fiction critics to detect a "return to human corporeality and agency" (Easterbrook, "Recognizing" 48) in Gibson's fiction. Yet, as this thesis argues, Gibson, on the trajectory of embracing embodiment, has been steering towards the point of concrete materialization all along. Rei Toei is described as crawling out of a nanofax – a device we might associate with a 3D printer – in flesh and blood, "butt-naked … black hair, maybe Chinese, Japanese … long and thin … straightening up, still smiling" (*All Tomorrow's Parties* 268-9).[100] By understanding the eventual incarnation of the "ray toy" as a paradigm shift in Gibson's work, Wiggins remarks that in *All Tomorrow's Parties* at last, "Gibson rethought the importance of materiality" (79). The devaluing "body is meat" dictum from the Sprawl trilogy is now overtly reversed, "privilege[ing] human corporeality above all else" (Easterbrook, "Recognizing" 48). While the promise of blissful disembodiment remains unfulfilled by cybertechnology, nanotechnology facilitates the materialization of intangible cognitive processes. In line with the overt privileging of the visceral, the idoru, in fact, portrays the transcendence of the virtual body.

MNEMONIC TISSUES

Taking the interest in the visceral a step further, Gibson pays particular attention to the textural specificities of the material body in *Idoru*. Scarred skin is Keith Alan Blackwell's most apparent characteristic, who is an otherwise secretive figure. In a scene depicting Laney's first encounter with Blackwell, the reader follows Laney's gaze over

> [t]he man's left ear was edged with pink tissue, smooth as wax. [He had] heavily scarred hands … Exposed flesh tracked and crossed by an atlas of scars, baffling in their variety of shape and texture. [One of his eyebrows] was bisected by a twisted pink cable of scar tissue (*Idoru* 5-6).

Concealing his identity in their meeting, all that is primarily available to Laney is Blackwell's outward appearance. The investigation of skin reveals, almost marvels at, the dermal irregularities and pertains less to the reasons for the infliction of former wounds or the experience of pain. Instead, the shape that the material inscription of past experience takes is exposed. Laney discerns "an obvious dental prosthesis," a "broken nose, never repaired," and the lack of the reconstruction of Blackwell's ear (5-6, 7).

[100] Moreover, 3D-printing technology as plays a central role in *The Peripheral.* In the novel Gibson explores 3D printers as a medium to produce weapons as well as narcotics and food.

Despite this overt display of extraordinary skin features, Blackwell is not met with the onlooker's gratifying experience of fascination and repulsion thus ensuring the latter of their normal physique—a function common to freak shows. Above all, Laney is curious, and while there is some discomfort in the scene it might as well spring from the secrecy of the situation. While it is Laney's curiosity that brings Blackwell's scars into prominence as something extraordinary, these do not serve to frame Laney as able-bodied, since his own extraordinary embodiment is established from the beginning. In this regard, Blackwell is not Garland-Thomson's freak who is simply and passively stared at. Instead, communicative control is balanced between "starer" and "staree" (*Staring* 77). Staring at the remains of Blackwell's left ear, Laney wonders, "why there had been no attempt at reconstruction"—no medical intervention for healing (5). The role of the staree in such encounter is essential. Ideally, according Garland-Thomson's "ethics of looking" both parties engage in a transitive action—a form of interaction that was prevented in Mercedes Purissima's case (*Staring* 194). Recognizing Laney's interested look as an act of communication, Blackwell replies "'So I'll remember,' … reading Laney's eyes. 'Remember what?' 'Not to forget.'" (5). The portrayal of Blackwell negotiates the physical traces of experiences as an engagement with mnemonic textures rather than discrediting stigma in Erving Goffman's sense. Similarly, Molly Millions appreciates her scars for reminding her of having been "stupid" in the past (*Mona Lisa Overdrive* 160). When Blackwell touches his scar tissue or squeezes his "lobe-stump," he does it "without hesitation or embarrassment" (27). Instead of depicting the scarred body in need of full repair, Gibson foregrounds how experience, be it painful or otherwise, transforms not only subjectivity due to made experiences but also the materiality of the body. There is no call for the corrective programming of plastic surgery. This blatant display of scarred skin and extraordinary physique, I argue, is presented in a manner that recognizes realistic and lived corporeality, and in this sense values a person's unique biography.

Serving the purpose of identification, or accentuating the uniqueness of a character, are popular functions of the scar as a motif in the literary tradition and can be traced back to the most canonical works of Western culture. It is the scar on his thigh that ultimately leads to Odysseus's identification in Homer's epic poem. The experience of injury reorganizes his body and mind leaving a mental memory as much as a physical scar. In the poem, the scar initiates the transition from boy to man—it marks a coming-of-age from innocence to experience.

Moreover, literary genres such as slave narratives, war narratives, and disability literature rely significantly on the motif of the scar. In *The Scar of Visibility* (2007), disability scholar and activist Petra Kuppers examines the "painful productivity of scars" in poetry, performance, and film (134). Kuppers argues that an exploration of scars may illuminate "the complexities and richness of living a disabled life" (141). Separate from a pathologizing perspective, Kuppers approaches the scar as a

> meeting place between inside and outside, a locus of memory, of bodily change. Like skin, a scar mediates between the outside and the inside, but it also materially produces, changes, and overwrites its site. If skin renews itself constantly, producing the same in repetition, the scar is the place of the changed script: mountains are thrown up, the copy isn't quite right, crooked lines sneak over smooth surfaces (1).

The productivity of scars bears on "an engagement with social and personal realities that open up moments of difference, of new alignments of power, individuality, and sociality—*productive* in the sense of allowing spaces for living to come into being" (1-2). Kuppers situates scars associated with disability somewhere between the complex polarities of pain and pleasure. In an analysis of Cronenberg's *Crash*, Kuppers identifies "how *pleasure* emerges in this play on the limit, along these scars, in the energies that surround the body/car complex" (127). The scar has a dual nature—it refers both to injury and healing, loss and recovery, the cut and the connection.

In the figuration of Blackwell, Gibson's representation of disability differs from those in the Sprawl trilogy in that restorations of the body are no longer complete. The extensions are made manifest in their material substructure, and the consequences of material embodiment are not neglected. Echoing the character of Turner from *Count Zero*, Blackwell similarly re-assembled is much less masterfully stitched and thereby blatantly displays the traces of corporeal reconstruction. In stark contrast to Turner's successful surgery, which results in his smooth able-bodiedness, Blackwell's seams bear witness to the striation of his body. The scars reveal the subliminal organization of matter that in a normalizing cultural context is hidden under smooth, normal surfaces.

Formally, the depiction of a scar allows breaking with the linearity of the plot. Odysseus' scar allows Homer to extend the narrative back into the past and thus to explore the connections between past experience and present identity. In a similar manner, Gibson's depiction of Blackwell's scars occasions to intersperse anecdotes of how he met Rez and subsequently saved his life. These jump cuts between past and present connect parts of the story that do not strictly follow the chronology of events, and can be read as structurally scarring the text itself.

4.2.3 Singular Context

While in *Neuromancer* the body's condition between corporeal extension into and interaction with the environment tingles under the surface, the body's interrelated status is more explicitly articulated in the Bridge trilogy. With his depiction of Colin Laney, in both *Idoru* and *All Tomorrow's Parties*, Gibson revisits the perspective of the netrunner. But, this time with a stronger consideration of the reciprocally informing nature of interlinkages between organism and environment. Laney is a stereotypically specialized outsider who professionally "spent his time skimming vast flows of undifferentiated data, looking for 'nodal points'", an expression of his savant idiosyncrasy (*Idoru* 25). Laney's extraordinary ability bears on

> a peculiar knack with data-collection architectures, and a medically documented concentration-deficit that he could toggle, under certain conditions, into a state of pathological hyperfocus. This made him… an extremely good researcher. (He made no mention of the Federal Orphanage in Gainesville, nor of any attempts that might have been made there to cure his concentration-deficit. The 5-SB trials or any of that.) The relevant data, in terms of his current employability, was that he was an intuitive fisher of patterns of information: of the sort of signature a particular individual inadvertently created in the net as he or she went about the mundane yet endlessly multiplex business of life in a digital society. Laney's concentration-

> deficit, too slight to register on some scales, made him a natural channel-zapper, shifting from program to program, from database to database, from platform to platform, in a way that was, well, intuitive. And that was the catch, really, when it came to finding employment: Laney was the equivalent of a dowser, a cybernetic water-witch. He couldn't explain how he did what he did. He just didn't know (25).

As a result of his hyperfocus, a technique comparable to data mining and data evaluation, Laney is able to scan databases and find exploitable information faster than any other netrunner. At the same time, his capability to hyperfocus is framed by his medically documented concentration-deficit. Seen in this light, Laney occupies a hybrid status in that his "most peculiar talent" makes him invaluable to research agencies, while his "illness" identifies a disability that underlies the cultural forces of normalization (*All Tomorrow's Parties* 126, 167). The cause of his hybrid condition is not congenital, but the result of drug trials conducted during his childhood at the orphanage he was raised in. As one character in *All Tomorrow's Parties* ambiguously summarizes:

> 'Laney is a sport, a mutant, the accidental product of covert clinical trials of a drug that induced something oddly akin to psychic abilities in a small percentage of test subjects. But Laney isn't psychic in any non-rational sense; rather he is able, through the organic changes wrought long ago by 5-SB, this drug, to somehow perceive change emerging from vast flows of data' (56).

Ultimately completely contingent on the context the one or the other prevails making hyperfocus and concentration-deficit not only mutually dependent but also identical at the core. What Gibson brings to the fore with this portrayal is how physical disability and physical superiority can stand in a sensitive and reciprocal relation. The fact that the deficit is not regarded as a disability per se points to the direction of what Jürgen Link calls "flexible normalism." This variant of traditional normalism describes how present-day social negotiations of "otherness" only becomes problematic when an individual does not or cannot opt for any of the culturally given sets of acceptable behavior (Link, "From the 'Power of the Norm' to 'Flexible Normalism'"). In other words, people with disabilities are not "a problem" as long as they are Paralympic athletes, theoretical physicists or soul singers. In the attempt to compensate for his deficit, Laney seeks gainful employment which he finds at the sensational television show "Slitscan," whose self-understanding it is to make and destroy media personalities.

From a disability studies point of view, the neo-capitalist undercurrent in Gibson's depiction is conspicuous. With regard to the accepted behavioral patterns which actually allow social recognition and admission of individuals, only economically-driven contexts are presented, thereby implicitly propagating a pervasive commodification of the body. Although Gibson already dissociates from overtly technological self-optimizing techniques, the body is still strictly subjected to a high degree of commercialization. Only when meeting the condition of successfully generating capital, does disability change into extraordinary talent, intuition, or touch. The participation in social life is reduced to the realm of economics. Laney's social life apart from his job is non-existent in the narrative. Rather, "Laney's ability to locate key data in apparently random wastes of incidental information [which] earned him the envy and grudging admiration of more experienced researchers" alludes to a social exclusion on the basis of his above-average ability (*Idoru* 38).

The metaphors that are meant to capture Laney's talent—the dowser and the water-witch—both index a fundamental dependence on feedback. The cybernetic water-witch resonates with digital information. Dowsing, on the other hand, originally describes the act of locating subterraneous substances, such as water, oil, metals, or mineral deposits. The various instruments used by dowsers ranges from rods, sticks, pendula, or to their own bodies, which usually indicates an attraction to the respective materials. Although explanations vary widely and wildly, many center on the flow of corpuscles or atoms between the respective material and the body, between the environment and the dowser. As a consequence, Laney's ability cannot be regarded as an inherent skill enclosed in the individual. Instead, his ability emerges from the interaction and represents a system in resonance with its data environment.

The reciprocal nature of this relationship manifests in another character's observation of "what Laney can do with data, and what data can do to Laney" (*All Tomorrow's Parties* 6). How data acts on Laney is depicted in *All Tomorrow's Parties* and features Laney as a homeless, desolate addict living in a shelter made of cardboard cartons. Addicted to complexity, Laney neglects actual material relationships, which leads to an intensified experience of information so much so that the data interconnection constitutes his being: "Laney's progress through all the data in the world (or that data's progress through him) has long since become what he is, rather than something he merely does" (163). In this line of thought, the data environment co-constitutes Laney as much as he co-constitutes the data environment.

Laney is intertwined in feedback loops with the data he scans for nodal points, and with Link's notion of flexible normalism in mind Laney's activity on a virtual plane is mirrored on the material level in the form of his interactions with the social milieu. The netrunner is thus not only provided with, but also actively shapes, a niche. This allows his cultural integration as well as consolidates the dichotomy between talent and deficit. Gibson writes, "Slitscan allowed him [Laney] to do the one thing he possessed a genuine talent for" (*Idoru* 40). But, Laney's talent, strictly speaking, only arises in his "singular environment" (*All Tomorrow's Parties* 56). Or, in what philosopher and cognitive scientist Andy Clark would call a "*proper context*" (272). The fundamental embeddedness of the organism within its context allows them to act in the first place. Clark argues that the organism's capabilities emerge precisely at the nexus of brain, body, and world, which he refers to as a "deeply interanimated triad" (272). Concerned with the consequences of his claim regarding the limits of the human extension, he wonders:

> how far we should then press this notion of cognitive extension … Should we just think of ourselves as cognitive agents who co-opt and exploit surrounding structures (e.g., pen and paper) … or is there a real sense in which the cognitive agent (as opposed to the bare biological organism) is thus revealed as an extended entity incorporating brain, body and some aspects of the local environment? (273).

Advocating that "[o]ur cognitive profile is *essentially* the profile of an embodied and situated organism," Clark turns to studies on Alzheimer patients and tuna fish to show how both human and animal abilities cannot be attributed to the physical and mental disposition alone, but to a large degree result from an actively sought interaction with the environment (273). With regard to Alzheimer patients, Clark observes that they were able to

> maintain an unexpectedly high level of functioning within the normal community. These individuals should not—given their performance on a variety of standard tests—be capable of living as independently as they do … external props and aids turn out to serve important cognitive functions. Such props and aids may include the extensive use of labels (on rooms, objects, etc.), the use of a 'memory book' containing annotated photos of friends and relatives (273). [101]

Hence a "reliance on various forms of wideware … as a means of counterbalancing a neurally-based deficit"[102] positively affects the performance and behavior of actors in their environment (273-4). Clark holds:

> there will be dense complementarity and cooperation between neural, bodily and environmental forces and factors. What the brain does will thus be precisely fitted to the range of complementary operations and opportunities provided by bodily structure, motion and the local environment. In the special case of human agency, this includes the humanly-generated 'whirlpools and vortices' of external, symbol-laden media: the explosion of wideware made available by the ubiquitous devices of language, speech, and text (272-3).

In other words, contrary to approaches of human (and animal) capabilities as inherent properties of the body, these examples show how what is commonly understood as a human (or animal) ability only emerges in the conjunction with the proper context, which in turn is shaped by the organisms living it. The illusion of an autonomously acting, independent, and powerful individual bears on both the use of innumerable technological props and the aids that structure our daily lives, as well as the simultaneous oblivion in doing so. According to Clark, the bare biological organism needs to be re-conceptualized as an extended phenotype always already an "organism-plus-wideware" since "[c]ertain aspects of the external world … may be so integral to our cognitive routines as to count as *part of the cognitive machinery* itself" (274). With the reconfiguration of the organisms' contour, not only the notion of "the

[101] A fascinating example paralleling the performance of Alzheimer patients is that of tuna fish. Clark explicates: "The tuna is paradoxically talented. Physical examination suggests it should not be able to achieve the aquatic feats of which it is demonstrably capable. It is physically too weak (by about a factor of 7) to swim as fast as it does, to turn as compactly as it does, to move off with the acceleration it does, etc. The explanation (according to the fluid dynamicists Michael and George Triantafyllou) is that these fish actively create and exploit additional sources of propulsion and control in their watery environments. For example, the tuna use naturally occurring eddies and vortices to gain speed, and they flap their tails so as to actively create additional vortices and pressure gradients which they then exploit for quick takeoffs and similar effects. The real swimming machine, I suggest, is thus the fish *in its proper context*: the fish plus the surrounding structures and vortices that it actively creates and then maximally exploits. The *cognitive machine*, in the human case, looks similarly extended . . . We actively create and exploit multiple linguistic media, yielding a variety of contentful structures and manipulative opportunities whose reliable presence is then factored deep into our problem-solving strategies." (272)

[102] Clark defines "wideware" as "states, structures or processes that satisfy two conditions. First, the item in question must be in some intuitive sense environmental: it must not, at any rate, be realized within the biological brain or the central nervous system. Bodily aspects and motions, as well as truly external items such as notebooks and calculators, thus fit the bill. Second, the item (state, structure, process) must play a functional role as part of an *extended cognitive process*: a process geared to the promotion of adaptation success via the gathering and use of knowledge and information, and one that loops out in some non-trivial way, so as to include and exploit aspects of the local bodily and environmental setting." (268)

human" but also the prerequisite of "the individual," in the sense of a discrete entity, begins to falter.

Moreover, the relationship between the characters Chevette and Skinner spans from *Virtual Light* to *All Tomorrow's Parties,* and delineates how their association enables both of them to act. Skinner, one of the first settlers of the San Francisco-Oakland Bay Bridge, who took runaway Chevette in, suffers from hip pain so that the range of his activities is co-dependent on his community. The narrator explains that "[t]oday, with his bad hip, the old man was in effect an invalid, relying on his neighbors and the girl" (*Virtual Light* 73). In *All Tomorrow's Parties*, Chevette reminisces about what resembled a caring father-daughter relationship:

> How he had found her, too sick to walk, and taken her home, feeding her soups he bought from the Korean vendors until she was well. Then he's left her alone, asking nothing, accepting her there the way you'd accept a bird on a windowsill, until she learned to ride a bicycle in the city and become a messenger. And soon the roles had reverse: the old man failing, needing help, and she the one to go for soup, bring water, see that coffee was made (65).

While his passage may bring to mind Farrell's notion of the prosthetic relationship between mother and child, the enabling (or disabling) nature of associations exceeds mere human relationships and extends to interactions with objects, such as Chevette's bike or the wild assortment of entities populating the Bay Bridge. Deeply affected by the sight of the bridge, Yamazaki, the sociologist who documents the events taking place over the course of the trilogy, describes his experience as follows:

> Its steel bones, its stranded tendons, were lost within an accretion of dreams: tattoo parlors, gaming arcades, dimly lit stalls stacked with decaying magazines, sellers of fireworks, of cut bait, betting shops, sushi bars, unlicensed pawnbrokers, herbalists, barbers, bars. Dreams of commerce, their locations generally corresponding with the decks that had once carried vehicular traffic; while above them, rising to the very peaks of the cable towers, lifted the intricately suspended barrio, with its unnumbered population and its zones of more private fantasy... Everything ran together, blurring, melting in the fog. Telepresence had only hinted at the magic and singularity of the thing, and he'd walked slowly forward, into that neon maw and all that patchwork carnival of scavenged surfaces, in perfect awe. Fairyland (*Virtual Light* 69-70).

Appreciating the heterogeneous and self-organizing nature of the bridge, Yamazaki cannot but draw on a variety of language registers—medical, mythical, technical, romantic—to convey his affect. Revisiting the Bay Bridge after her abrupt escape, Chevette realizes that is was here where, "she was sometimes happy, in the sense of being somehow complete, and ready for what another day might bring" (82). I argue, it is the high degree of interconnectivity between the various people, objects, materials, and subcultures of the bridge that translates into Chevette's feeling of completeness and empowerment. However, if its extensions and connections co-constitute the body and the self, by implication a lack of interrelations leads to their decline or resolution.

As *All Tomorrow's Parties* strikingly illustrates, Laney's data connection alone does not sustain his body and self. Instead, his physical isolation brings him to

the verge of death—a form of disembodiment not anticipated by the netrunner. When the "stalker syndrome" as a long-term effect of the 5-SB trials kicks in, he becomes obsessed with the media figure, PR genius, and antagonist Cody Harwood, who leaves only negative traces in databases. Following his addiction to data complexity, Laney detects an impending paradigm shift that will change the world "as we know it" and "the points from which change was emerging, would repeatedly bring Harwood to his attention" (163). In the nodal points Laney sees that Harwood, who had taken 5-SB deliberately to enhance his data mining capacities, is equally aware of the upcoming historical shift and attempts to manipulate them in his favor. Harwood is framed as "an agent of change" and to understand the nature of the complex entanglement of parties Laney is instructed to "[t]hink network" that is to consider relations and follow the flow of action rather than to evaluate functions and causalities (209). Impeding Harwood's evil, yet never revealed, plans is Laney's primary and only goal. However, this as a last consequence leads to his abandonment of the subject as well as the object position, becoming "merely adjectival: a Laney-colored smear, meaningless without context. A microscopic cog in same catastrophic plan. But positioned, he sense, centrally. Crucially. And that is why sleep is no longer an option" (71-2).

Context does not only produce meaning, but may enable action and articulates the body and self. This radical relationality is epitomized by its negative: a drastic de-contextualization on the material level in form of a lack in social participation whatsoever results in the physical deterioration and a mental "Hole" at the center of Laney's being.

> Laney is in drift. That is how he does it. It is a matter of, he knows, letting go. He admits the random. The danger of admitting the random is that the random may admit the Hole. The Hole is that which Laney's being is constructed around. The Hole is absence at fundamental core" (40).

Jacking into cyberspace is no longer associated with either a transcendent experience or an adrenalin high, but a form of disembodiment that bespeaks dire excavation, an absence of the body, and an emptiness of the mind. Gibson presents a scenario in which "Laney tastes blood. It is a long time since he has brushed his teeth, and they feel artificial and ill-fitting, as though in his absence they have been replaced with a stranger's" (222). Since the enmeshment with technology is not permanent, Laney time and again becomes "suddenly and terribly aware of his physical being, the condition of his body" (178). Exceedingly disregarded in the Sprawl trilogy, the material consequences of the body's connection to a cyberspace deck receive all the more attention in the Bridge novels.

Besides his physical disintegration, Laney realizes that there is no final essence of the self, which is actually a hybrid product of both material and immaterial interrelations. In dissociating from the material world, Laney decontextualizes and observes his demise:

> 'That Hole at the core of Laney's being, that underlying absence, he begins to suspect, is not so much an absence in the self as *of* the self. Something has happened to him since his descent into the cardboard city. He has started to see that previously he had, in some unthinkably literal way, no self' (71).

Inherent to the conceptualization of the organism-plus-wideware, is the implication that a deprivation of such external connections leads to the disabling of action, and ultimately to the demise of the organism.

Such awareness and emphasis on external material aids is common in discussions of disability, though it is rare in debates over human ability. While a certain dependence on an external setting with regard to disabilities seems to be almost too obvious, Clark shows how dependence is integral to the human, and even animal, condition. Neither abilities nor disabilities can be ascribed solely to an individual's performance or disposition. Instead, this becomes a relational matter. When "wheelchair users describe how the chair becomes 'part of them' " we can effectively understand the wheelchair, as much as any other technological prosthesis, as what Clark identifies as "wideware" (Reeve 104). Complimentary to Rudy Rucker's cyberpunk preoccupation with software, hardware, wetware, and realware,[103] a recognition of Clark's wideware expands concepts of human (and animal) modes of embodiment beyond science fiction.

All Tomorrow's Parties introduces another character, who turns out to have an extraordinary talent for data retrieval. Silencio is presented as a neglected child from a lower-class background, who due to his condition is easily utilized for drug dealing. Contrary to what his name suggests, his initial muteness is caused by his lack of English fluency rather than a pathological inability to speak. And yet, there seems to be something "wrong" with Silencio. He apprehends the world through feeling rather than cognition (29). Witnessing a murder, Silencio makes the observation that in this instance, "Silencio looks at the black knife, how is rests in the man's hand. He feels that the knife holds the man. That the knife may decide to move. Then the man moves the knife" (31). Irrespective of the traditional paradigmatic allocation of agency in a subject-object dichotomy, the child discerns goals and agency in both the man and the knife. Gibson's transition to the Bigend trilogy is finalized when *All Tomorrow's Parties* closes with reference to networks, agents, and material agency—a logic that undergirds Gibson's third trilogy. Central to my analysis of the Bigend novels is the material-semiotic method of Bruno Latour's actor-network theory, following which Silencio's "knife-man," can be read in accordance to Latour's gun-man—a prime example of what Latour calls a "composite agent." Arguing against both the "myth of the Neutral Tool under complete human control" (the knife or gun) "and the myth of the Autonomous Destiny that no human can master" (the man), Latour proposes a third option (*Pandora's Hope* 178). That is, the "creation of a link that did not exist before and that to some degree modifies the original two" (179). The link between the gun or knife and the man, may result in unexpected results. As Latour over-simplifies: "You only wanted to injure but, with a gun now in your hand, you want to kill" (178-9). Furthermore, Silencio conveys the mode of perception that we should re-learn in order to perceive of what Jane Bennett calls "thing-power." In her new materialist approach, Bennett reminds her reader of "a childhood sense of the world as filled with sorts of animate beings, some human, some not, some organic, some not" (*Vibrant Matter* 20).

Silencio's observations remain uncommunicated and his overall unresponsive nature prompts characters to doubt his subjectivity. As one character comments, "[t]here is nothing between the boy's gaze and his being: no mask. No personality" (41). Silencio is constantly met with a critical, even clinical gaze: "This one, now, has something missing. Something wrong; not a state bespeaking drugs, but some more

[103] See Rudy Rucker's tetralogy *Software* (1982), *Wetware* (1988), *Freeware* (1997), *Realware* (2000).

permanent mode of not-being-there" (50). Fontaine, who takes the boy in puts him under close scrutiny says of his juggling various diagnoses, "This by now, he very likely had some sort of brain damage, and most likely congenital" (130). When Silencio takes deep interest in watches, absorbing information on brands, models, mechanisms, values, and uses the cyberspace to locate individual exemplars, his depictions suggest the diagnosis of an autistic child, or "idiot savant" who is more attuned to a watch's face than a human's. Drawing on the cliché of an autistic genius to make sense of the boy's behavior shows how this cultural trope is the most readily available to the Fontaine. However, the efforts to conclusively diagnose Silencio amount to an ultimate ambivalence on the part of Fontaine: "that absence behind the brown eyes, staring back at him, either infinitely deep of no depth at all, he couldn't tell" (132). The figuration of Silencio illustrates how culturally over diagnosed, and yet sparsely understood, the phenomena of extraordinary embodiment are. It is the social model of disability that enforces criticism of the authority the medical sciences have held over constructions of disability.

In this chapter, I have shown how Gibson continues on his trajectory from virtual to embodied characters: corporealizaion is epitomized in the transformation of the idoru from light to matter. Moreover, the Bridge trilogy presents more complex characters in the sense that their wider socio-political context is taken into view and with that culturally informed attitudes and communication strategies. The novels reveal an increasing awareness of the significance of external, both material and social factors in the construction of abilities and disabilities. The entanglement and reliance of a body on its social and material environment has been read against the backdrop of the social model approach and supplemented by Clark's notion of the "organism-plus-wideware." A main concern of this chapter has been the discussion of a female disabled Mexican figure, whose identity is posited between the polarities of virtual and material existence. To that end, I have drawn not only on the social model approach to disability but laid out the theory of intersectionality that facilitates the consideration of race, class, and gender as intersecting identity categories. By understanding the interlocking of in particular disability and race in the U.S. American socio-historical contexts, the subversive quality of Gibson's narrative strategy in decoupling these identity markers becomes transparent.

4.3 The Body and Actor-Networks: The Bigend Trilogy

At the heart of each novel of the Bigend trilogy appears marketing guru and founder of the Blue Ant Agency, Hubertus Bigend, as the wirepuller. In *Pattern Recognition* he hires Cayce Pollard to find the maker of secret video art. Then, in *Spook Country* he employs ex-rock star Hollis Henry to report on locative art as a means to spy on geohacker Bobby Chombo. Lastly, in *Zero History* he appoints Hollis and ex-addict Milgrim to track down the designer of Gabriel Hounds, yet another secret brand.

While figurations of extraordinary embodiment feature strongly in *Pattern Recognition*, they only peripherally appear in *Spook Country* and *Zero History.* As one critic observes with regard to *Zero History*, "inanimate objects and, in particular, the brands of those objects, are more fully illuminated than the characters using those brands" ("Review" 25). Both latter novels interrogate the nature and flow of information, making the novels what I call "data narratives," rather than "digital narratives" in the sense of Gibson's early fiction. The locative art introduced in *Spook Country* relies on GPS coordinates, signals from RFID, and stable WiFi to create virtual site-specific multimedia installations of, for instance, River Phoenix collapsing on the Sunset Strip or F. Scott Fitzgerald having a heart attack. When accessed through a virtual reality headset, these artworks overlay actual physical locations with spectral 3D bodies, furniture, or architecture. Thus, divergent realities, or "annotated environments," are created (173). Whereas in his technoromantic narratives characters *enter* the virtual space of the matrix, in the third trilogy cyberspace "everts," and thus "[t]urns itself inside out" (28, 30). In this way, cyberspace seeps into reality.

In the following, I will first focus on instances of extraordinary corporeality in *Spook Country* and *Zero History*. Then, I dedicate the rest of this chapter to an analysis of Cayce Pollard and Nora Volkova from *Pattern Recognition*. There are almost no instances of physical body modifications in these latter novels. The only explicit mention of prosthetics is when the character Garreth Wilson, a base jumper and Hollis' later boyfriend, is involved in an accident, and has his thighbone rebuilt from a new material. Consider the following dialogue:

> 'Rattan. The stuff they weave baskets and furniture out of. They've found a way to turn it into a perfect analog of human bone.'
> 'You're making that up.'
> 'They're just starting to test it on humans. On me, in fact. Works a charm on sheep.'
> 'They can't. Turn that into bone.'
> 'They put it into ovens. With calcium, other things. Under pressure. For a long time. Turns to bone, near enough.'
> 'No way.'
> 'If I'd thought of it, I'd have had them make you a basket. Brilliant thing about it, you can build exactly the bone you need, out of rattan. Work it as rattan. Then ossify it. Perfect replacement. Actually a lot stronger than the original. Microscopic structure allows the blood vessels to grow through it.'
> (*Zero History* 273-4).

In no more than an aside, the restoration of Garreth's leg is mentioned. The display of fascination for new technological procedures in rehabilitation and the enhancement of functionality present a reminder of the materiality of embodiment. But Garreth's corporeality is inconsequential to the overall plot, and this minor anecdote is easily

missed. A decreasing interest in prostheses is met with an increasing attention to the constitutive interactions of organism and environment, as well as the psychology of extraordinary embodiment.

4.3.1 Psychology

It is within the Bigend trilogy that Gibson's writing increasingly pays attention to the psychology involved with extraordinary embodiment. In *Spook Country* readers encounter Milgrim, a drug addict and translator who is taken captive by an ex-government, possibly CIA, agent named Brown to spy on a Chinese-Cuban crime-facilitating family and translate their messages. As a figuration, Milgrim offers a negotiation of the corporeal as well as psychological consequences of addiction, rehabilitation, captivity, and obedience. When Milgrim remembers that "[h]e hadn't been in a very good state at all, when Brown had turned up, and someone with Ativan and orders had seemed like not such a bad idea," this anecdote links back to actual historical strategies for the recruitment of spies and identifies traditional indicators for vulnerable targets (66). These indicators were anything from financial difficulty to drug abuse. As clinical psychologist Ursula Wilder explains,

> A well-trained espionage recruiter will search for vulnerable targets. Professional intelligence of officers are trained to spot outward signs of trouble in a person's history or behavior—such as tumultuous relationships or frequent job changes—and to evaluate the deeper, more enduring psychological dysfunctions that may be at the root of the problems. These professional recruiters are trained to deploy sophisticated psychological control techniques matched to the vulnerabilities they have detected in order to manipulate, apply pressure, or induce a person to commit espionage. Some intelligence services do not limit themselves to exploiting pre-existing problems, but may actively foster crises to enhance the target's susceptibility to recruitment. Common forms of such aggressive pursuit and manipulation of targets include emotional or sexual entrapment and financial manipulation through increasing the target's level of debt. A psychologically vulnerable target's grandiosity, sense of being above the rules, or vengeful impulses can all be manipulated in the service of recruitment (34).

When the objective is set on making the target practically and psychologically dependent, illegal drugs can serve the purpose of turning an addict into a spy. Either the target is already addicted or the agent gets them hooked on drugs; in both cases the agent provides the daily supply. In another approach, the target's use of illegal drugs can be made a reason for blackmail. Furthermore, the routine that drug addicts have developed in leading a double life (i.e. one private, secret and addictive and the other public, official and full-functioning) is advantageous in espionage operations. [104]

[104] Wilder cites a study in which "the CIA surveyed 1,790 randomly selected employees to establish a baseline of employee attitudes and opinions regarding counterintelligence and security policies, procedures, requirements, and training. The results attest to employee awareness of the links between psychological factors and counter- intelligence risks. Those surveyed identified emotional instability related to ambition, anger leading to a need for revenge, feelings of being unrecognized and unrewarded, and loneliness as the top vulnerabilities on the road to espionage. They ranked such

Moreover, Milgrim's name is a pun on psychologist Stanley Milgram, who in 1961 conducted social psychology experiments on the question of obedience to authority figures. His landmark study claims that, a high proportion of subjects will fully obey an authoritative instructor despite some reluctance (*Obedience to Authority: An Experimental View* 1974). Kidnapped and provided with a daily dose of Ativan, Milgrim at times ponders disobeying the captor's authority but never actually does:

> Milgrim wondered idly, almost luxuriously, what it might be like to pick something up, just then, and hit Brown in the head with it. He actually glanced around the back of the van, to see what might be available" but "he hadn't hit anyone in the head since elementary school, and wasn't likely now" (38, 39).

His inability to disobey is not grounded in empathy though. In an almost sarcastic tone, Gibson makes Milgrim conclude, "that Stockholm syndrome was a myth. Going on a few weeks now, and he still wasn't empathizing with Brown. Not even a little bit" (*Spook Country* 27). His captivity forcibly limits Milgrim's possibilities of interaction, of learning to be affected. Similar with a Latourian approach, this prevents the development of discriminative abilities with regard to oneself as much as the world. In other words, it prevents articulation. The restraint of the self articulating becomes visible when Milgrim hears himself talk in "a version of [his] own voice, somewhere within some remaining citadel of self" (66). In comparison, Milgrim's ability to observe objects is said to be decently developed, while his ability to interact with people or be aware of his own feelings is poorly articulated, and makes him both solitary and unsociable.

In *Zero History*, Gibson presents Milgrim's rehabilitation from drug addiction as well as the articulation process of the self as a social being. Time and again, Milgrim remembers his eight-month clinic stay in Basel, the blood change, and his cognitive therapist who compared his recovery to "being born" hinting at his pending learning processes (11, 26-27, 28). As his therapist notes, "[h]e was more at home in the world of objects than the world of people" (111). In therapy, Milgrim confronts his experience of "emulating a kind of social being that he fundamentally wasn't. Not that he was unconcerned with the pain he saw in Hollis' eyes, or with the fate of her friend, but that there was some language required there that he'd never *learned*" (174, emphasis added). In a child-like voice, he refers to himself as a "robot" in social interactions (82). He realizes that he has "worked very hard to avoid feeling much of anything, for most of his adult life, recognizing even the simplest of his emotions could require remedial effort" (108).

It is through interactions with his therapist, Bigend, Hollis, and everyone involved in the investigation of Gabriel Hounds that he gradually matures, and that his body and subjectivity are articulated. This process of articulation is described in terms of an inner expansion, differentiation, and of "[s]omething was unfolding within him" (123). For Bigend, who sponsored Milgrim's rehabilitation, Milgrim is no more than a curious test object. But Milgrim himself is motivated not so much by the normalizing quality of "overcoming" or "fitting-in" as he is by the exploration of his re-discovered self. During the process of maturation Gibson presents scenes of Milgrim's self-discovery. Consider the following:

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problem behaviors as drug abuse and illicit sex as second, and various mental crises or stresses brought on by debt, work issues, or psychological factors such as depression as third." (20)

> ‘I’m in recovery,’ said Milgrim. ‘I’m *supposed* to be different. If I were high, I wouldn’t *be* different.’
> ‘You seem angry.’
> ‘Not with you.’
> ‘But you weren’t angry, before.’
> ‘It wasn’t allowed,’ he said, and she heard his amazement, as if in saying this he’d discovered something about himself he’d never known before. He swallowed (127).

While captivity isolates Milgrim on a physical level, drug use does so on a psychological level, thus further reducing his interaction with his environment. In the chapter titled “Insulation,” Milgrim compares the effect of drug-induced perception to “eating exceptionally hot Szechuan” (*Spook Country* 179). He further describes that, “drinking cold water on top of [this] serious pepper-burn the water fill[s] your mouth entirely, but somehow without touching it, like a molecule-thick silver membrane of Chinese antimatter, like a spell, some kind of magic insulation” (179-80). While Milgrim describes the silver membrane insulation as “strangely delightful,” it is again what prevents his psychological maturation (179). Passages like these give testimony to Gibson’s phenomenologically driven descriptions of the lived experience of extraordinary embodiment. Gibson resorts to a language of the body to capture the feeling of detachment, isolation, and numbness that Milgrim perceives due to anxiety and drug abuse. This visceral language comes close to what the actual physical experience feels like. Similar to the argument made in chapter 4.2 of this book regarding the struggle for a more realistic depiction of extraordinary embodiment being dependent on mental images in order to imagine lives other than one’s one, Gibson’s language comes microscopically close to corporeal experience. Methodologically, this is what makes Gibson’s work new realist in the Latourian sense. When Mitchell and Snyder call for a “return to a phenomenology of the disabled body,” the realization is to take place on the basis of a language dedicated to the visceral (“Re-engaging the Body” 368).[105]

The physical and psychological experience of addiction and anxiety resonates in Milgrim’s description, which does not rest on the metaphor of a machine but instead on a structural principle of architecture. Buckminster Fuller’s architectural idea of tensional integrity describes how a system of individual components in compression inside a net of continuous tension has by now become a common model for the architecture of the human body in physiology, further conceptualizing the body as stable and yet flexible.

> Addicted, not to put too fine a point on it, to substances countering a tension at the core of his being; something wound too tightly, perpetually threatening to collapse his person; imploding, as though a Buckminster Fuller tensegrity structure contained one element that perpetually tightened itself counter to the balance of forces required to sustain it. That was the experiential nature of the thing, though he was still capable, in the abstract, of considering that possibility that the core anxiety as he knew it today was in part an artifact of the substance. (*Spook Country* 231-2)

[105] A similar argument is found in Simi Linton’s *Claiming Disability* (1998).

While *Spook Country* offers insight into addiction, captivity, and obedience, *Zero History* focuses on the processes of recovery and maturation. The portrayal of recovery from psychological and physical abuse is not paraded or exploited for literary purposes, but is instead embedded in the character's overall life activities, thus not reducing the character to any one single identity marker. In this sense, I argue for a complexity in the sense of Mitchell and Snyder's "complex disability subjectivity" inherent in the depictions of the extraordinary corporeality and subjectivity in the Bigend trilogy that can be framed as a new realism of the body (*Narrative Prosthesis* 10). The most notable examples are the two protagonists of *Pattern Recognition*, Cayce Pollard and Nora Volkova.

4.3.2 Sensitivity

Pattern Recognition centers on Cayce Pollard, a freelance "coolhunter" who works for international marketing companies until commissioned by Bigend to find "the maker" of a collection of film clips, enigmatically known as "the footage," whose underground proliferation can be considered viral (6). One of the main characteristics of Cayce Pollard, the protagonist of *Pattern Recognition*, is her ability to be affected. She shows a peculiar sensitivity for trends, for the success of products on the marketplace, and this grants her the reputation of being "a sensitive" (2). This explicit designation highlights that her sensitivity to her surroundings is not of the regular kind but of the extraordinary. The ability to discern emerging group behavioral patterns is extraordinary in terms of the amount and diversity of actors that Cayce can discern.[106] As "a dowser in the world of global marketing," Cayce anticipates markets before they surface (2). Cayce's explains her talent as simply, "pattern recognition. [She] tr[ies] to recognize a pattern before anyone else does … It gets productized. Turned into units. Marketed" (88). If the perception of a pattern enables action, rather than inducing an allergic reaction, this can lead to a transformation of the market, and in a sense the world. Her work principally consists of two activities: walking the city streets to perceive how and by what people or things are affected, and meeting contractors who present her with new product designs in order to determine whether a product will succeed on the market or not. Both activities demand confrontation. Whereas on the street Cayce's sensory capacity is constantly requested, the presented draft designs impact her in unknown ways and possibly problematize the integrity of the body if they were to trigger painful allergic reactions.

Compared to the meticulous staging of Cayce's extraordinary sensitivity to trends, Bobby Chombo's sensitivity in *Spook Country* and *Zero History* is less elaborated on but indicates a similar knack for patterns. Geohacker Bobby has a talent for data patterns and the flow of information. Praised as the "king of tech-assist," he is at the same time attested to be, "Strange? Definitely. [and] Difficult" because he "sees everything in terms of GPS gridlines, the world divided up that way … He won't sleep in the same square twice" (*Spook Country* 43, 55). Dividing his environment up into smaller squares of a virtual grid might be read as an adjustment, a coping mechanism to counteract his agoraphobia (68). New to Gibson's work is the extent in

[106] Cayce's parents are also characterized through their ability of pattern recognition. Her father works in "human crowd control" and responsible for the design of barriers for rock concerts, while her mother's talent is constantly doubted and a paranormal ability is implied as she finds messages in the electronic noise. While it is the same or at least similar ability the degree of acceptance and recognition depends on the context of application.

which he blends reality and virtuality, and the directionality which is inherent to this particular characterization. To Bobby, the GPS grid is so integral to his reality that he acts upon it. His sensitivity to virtual patterns of information is so acute and so strongly articulated that the distinction of actual and virtual blurs. While lives in the Sprawl trilogy and Bridge trilogy take place on either the vertical axis (i.e. in virtuality) or on the horizontal axis (i.e. reality), *Spook Country* and *Zero History* present a world in which reality and virtuality are no longer completely different places but, in fact, overlap.

The expression of the body's extraordinary nature in the Bigend trilogy is conceptualized with recourse to the notion of context rather than norm. Here disability is understood neither as an inherent nor an overridingly deficient quality, despite a disability's sometimes disabling properties. Cayce's extraordinary corporeality is specific, since it is always directed towards some patterns and not others. It is therefore always partial and remains invisible until triggered. As long as her "cool-module" is not set off or an allergic reaction triggered, disabling properties remain absent. In her analysis of pain, Winance observes that, "the daily experience of one's body is in fact that of an absent body" ("Pain" 1110). Only with the occurrence of irritation does pain, and thus awareness of the body, arise. "Pain prevents us from acting," Winance explains, "it paralyses us" (1110). In this way, the expression of Cayce's extraordinary embodiment varies with regard to the contextual specificities. Depending on the contextual arrangement of relations, Cayce is either able or disabled to act in different and specific ways. Abilities and disabilities result from the relations (or the disruption thereof) that people have with other entities. With reference to Elaine Scarry, Winance underlines the destructive power of pain which "deconstructs the subject's world and encloses it within his/her body," a process of cutting him/her off (1112). In her analysis, Winance relies on a phenomenological perspective on the "experience of pain as a transformation of 'the being in the world' " (1111). Indeed, Gibson leaves ample hints as to how to read Cayce's on-going articulations of body and subjectivity. The narrator describes that, "eyes closed, she finds herself imagining a symbol, something watermarking the lower right-hand corner of her existence. It is there, just beyond some periphery, beyond the physical, beyond vision, and it marks her as…what?" (80). In a striking response to this passage of self-inquiry, the next word in the book is "Trans" and is the title of chapter nine (81). Unambiguously marked, Cayce's extraordinary corporeality and subjectivity emerge in a condition of "trans"—in constant transition, transformation, and transgression. On a diegetic level "Trans" refers to an advertising agency with a peculiar word-of-mouth advertising strategy. But, on a formal level Cayce's markedness as "trans" indexes the central role of transformative processes in *Pattern Recognition*.

In recent scholarship related to disability studies, this is precisely the direction that scholars like Shildrick and Braidotti point to in search for a more viable model of embodiment that attributes less value to the contentious dis/ability distinction. In her 2006 book *Transpositions: On Nomadic Ethics*, Braidotti raises a series of questions that suggest the emancipatory potential of viewing the subject as fluid. She asks, "so what then, what if the subject is 'trans' or in transit, that is to say no longer one, whole, unified and in control, but rather fluid in process and hybrid? What are the ethical and political implication of a non-unitary vision of the human subject? (9). With reference to Clark's conception of the extended phenotype, Cayce can be read as not separable from the ever-changing fluidity of her milieu. Her self emerges where brain, body, and environment collide and is further marked by what Shildrick in an essay fittingly titled "Border Crossings" calls a "fluidity of becoming" (145). Not

only does Cayce's form of subjective embodiment fluctuate in its expression as either boon or bane, talent or handicap, but on another level, her physical body is in a constant shuffling and swaying through space. Cayce is constantly facing and transgressing the "[l]iminal," and is always surrounded by "thresholds, zones of transition" (*Pattern Recognition* 263). Presented as an American who is never in the states, Cayce's closest place to home is the online Footage:Fetish:Forum (or short F:F:F). For Cayce, "the forum has become one of the most consistent places in her life, like a familiar café that exists somehow outside of geography and beyond time zones" (4-5). The condition that the highly globalized reality enforces is, in Hollinger's terms, a "historical transitoriness of the now, a moment that is virtually defined by the fact that it cannot remain itself" ("Stories" 464). What Hollinger indicates is that the temporal reality in *Pattern Recognition* is in a state of incessant transformation. As Cayce notes, "I only know that the only constant in history is change" (*Pattern Recognition* 59). This resonates strongly with what Heinz von Foerster, in an attempt to arrive at a cybernetic theory of subjectivity, means when he states that the self does not appear as something static or solid but rather is perpetually produced.[107] In light of this, von Foerster proposes to think of the human not as human being but as "human becoming" (*Kybernethik* 96). The cybernetic organism as von Foerster imagines it, thus presents itself not so much as a body augmented by technology, but as a body in perpetual flux with its environment. In this sense, Cayce's portrayal follows a truly cybernetic logic.

Therefore, being affected takes shape in various forms. Cayce is described as being "literally, allergic to fashion" (8). Rather than a metaphorical description of a style pundit, catching sight of certain logos has real disabling consequence for Cayce in the sense that her sensitivity produces violent and painful experiences. For instance, when Cayce walks through a clothing store, she is confronted with a variety of trademarks and in Gibson's satirical voice we learn that, "Tommy Hilfiger does it every time" and that "[i]t's something to do with context" (17, 18). Cayce explains how the derivative quality of this brand, its high level of simulation and little originality makes it "devoid of soul" and thus its sight is unbearable (18).[108] The Tommy Hilfiger logo triggers "pure reaction, like biting down hard on a piece of foil" (18). The comparison here is to the voltaic effect which explains why biting on aluminum can be painful. The pressure from biting brings two dissimilar metals, aluminum foil and the mercury in fillings or gold in crowns in contact within the moist, salty environment provided by saliva. The two metals have an electrochemical potential difference and on condition of their connectedness electrons flow from the foil into the tooth. The electrical current gets conducted into the tooth's root, thus to the nerve and the brain, which interprets the impulse as pain. While it is said to be Cayce's "psyche" that is affected, a psychological reaction "in her head" that drains "her energy," the representation here is that of a chemical reaction that provokes physiological consequences, such as swellings, nausea, and vomiting (17, 18). There is also some of Siebers' grittiness in Cayce's painful reaction to fashion. However, her disability is volatile and the occurrence of pain dependent on the specificities of her environment. Closer to Winance's description of pain, what Cayce experiences is depicted as an unstable and multidimensional phenomenon; a physiological, psychological, personal, and cultural experience. Acknowledging a high variety in

[107] See Bernhard Pörksen's *Wahrheit ist die Erfindung eines Lügners* (1998).

[108] As the brand implies endless reference, the footage contains no reference at all which constitutes its original character and pleasure for Cayce.

sensitivity to pain,[109] Winance explains how this phenomenon signals a threat to the organism with respect to the "rupture" of the established links with the environment and the "constriction" of the person's composition. In order to overcome the pain and regain her mobility, Cayce needs to leave the scene as quickly as possible and considers escaping to the bar on the fifth floor where the "swelling can subside" (19).

While we learn that Cayce's non-normative sensitivity involves physiological and psychological reactions, the formal description denies any profound insight into Cayce's perception of them. Once an allergic reaction is set off, descriptions become minimal, fractional, and functional. Cayce's escape to the bar is depicted as follows: "She can go there. There is a lift. Yes, a lift: a closet-sized elevator, small but perfectly formed. She will find it, and use it. Now. She does. It arrives, miraculously empty, and she steps in, pressing 5" (18-19). Whatever acoustic entertainment is playing in the elevator, be it music, voices, or advertisements Cayce "blocks it out" in this moment (19).

It is exactly such raw description, I argue, that allows coming close to what Cayce experiences. In the acute experience of pain, the affected person withdraws from the world into the body. In pain, the body is predominantly experienced as recessive and the capacity to make links with the environment is restricted. Drawing on Leder's idea of "intentional rupture," Winance explains how the experience of pain induces a specific sequence of reactions. Winance says, "as soon as I'm in pain, I shut myself off from the world and concentrate on the pain. Pain causes a break in my relationship with the world or with other people" ("Pain" 1111). In this way, pain reduces the "ability to move and [the] capacity to perceive the world" (1111). Besides this rupture between person and environment, pain furthermore provokes an internal rupture to occur. With reference to Leder, Winance explains how pain brings about the separation of the embodied self into a "body-subject (which perceives) and a body-object (which is perceived)" (1111). Callon and Rabeharisoa, on the other hand, suggest the distinction between "to be a body" and "to have body" to capture such process of division (qtd. Winance 1113). When the character's links to the environment are problematized in *Pattern Recognition*, the writing does not tell the reader about that process but instead mirrors it in language as in the above passage. No introspection or reflection on the receding body is elucidated, but the experience is formally enacted when the sentence structure becomes "jerky" or, staccato-like. There is no longer a continuous flow. There are no smooth transitions between sentences but language becomes ruptured, itself receding. This mimetic mode achieves directness. The free indirect style in phrases like "Yes, a lift" gives insight into how inarticulate and basal Cayce's thoughts are in a moment of pain.

A similar mode of description can be found in the scene where Dorotea, the antagonist, confronts Cayce with the design of the Michelin Man, a design that is one of her worst triggers:

> Cayce is about to scream … Cayce tries to open her mouth, to say something. How did Dorotea know? The silence lengthens. … 'Cayce? Are you feeling well? A glass of water?' … She's clutching the edge of the table. … 'I…It was Heinzi's design. It…affected me.' She manages a mechanical grimace, something like a smile. … She gets up from her chair, feeling unsteady. 'I'll

[109] For example, to soldiers the experience of pain signals that they are still alive while to the average citizen it poses a danger to life (see Winance, "Pain").

> need the car, please.' … Her legs feel wooden. She gets to the door, somehow (99-101).

Again, once the protagonist is in pain, language becomes ruptured and insights into the perception of pain are denied. Only when the pain subsides, a movement of extension into the world is possible again. Relations to other entities can be renewed, interaction becomes possible, and language is connective again. The strength of Gibson's writing lies in its mimetic quality, in how his language and style mirror the experience of pain, rupture, and vulnerability. Cayce's non-normative sensitivity to patterns and to group formation processes makes her vulnerable to logos, products, their usage, display, and ownership. That Cayce "feels the things she herself owns as a sort of pressure" highlights an attentiveness to her enmeshed position in a network of heterogeneous material entities (91). Furthermore, such phrasing attends to the agency of things. She perceives the pressure that things exert. Here, pressure operates on the embodied self and addresses both the psyche and the physique.

In other words, on the level of plot as well as form, *Pattern Recognition* attends to the painful experiences involved in non-normative corporeality in such a way that does not simplify, universalize, or intellectualize the experience. Rather, the plot and form of *Pattern Recognition* values the disabled body by giving room to messy, material, and personal expressions of corporeality. This is what makes the narrative new realist in method. In an almost Latourian spirit, the narrative establishes closeness to the experience of extraordinary corporeality rather than providing an objective, truthful, outsider's description of factual mechanisms involved in disability. Channeling Latour, I claim that a focus on the resonance and dissonance of a character with other entities, and of a body and its environment, is what makes the subject "interesting, deep, profound."[110] In a new realist style, narrative does not reduce Cayce's embodiment as given, static, or essential. Instead, it allows transformations and partial articulations to come into view. By portraying extraordinary embodiment as a relational, specific, and variable phenomenon, the narrative comes to value the complexity of the disabled body. Such approach is attuned to a variously articulated sensorium; an articulation that is always situational, always partial. Along these lines, disability cannot be understood as a single overriding characteristic, but demands the consideration of individually more or less articulate abilities.

In contrast, when literary scholar David Wills narrates his father's experience of phantom pain in his book *Prosthesis* this is done in a diegetic rather than mimetic style. Consider the following:

> there is no controlling it in spite of finally leaning way out against gravity with all the grace of pure dissent, the candor of a protracted liminal pause that provokes its own interruption, dancing on the fluid edges of an affirmative no return … the moment seems saturated beyond all logical possibility … for the data dam is bursting on its axial pinpoint such that nothing can be said to be present there within the bounds of a confinable space, nothing but phantoms of the present where all is shifting, crossing, functions of relay, except that perhaps, what else to say, across that ghost of a space there comes the change, where once there was only shifting there is suddenly a beast rampant in triumphant otherness, all fluid and gleaming (2).

[110] As quoted earlier in this chapter; see Latour, "How we Talk About the Body" 210.

Very much like Cayce's somatic and uncontrollable reactions to her environment, Wills frames his father's experience as 'dancing on the fluid edges of an affirmative no return.' Expressive of a modality of existence that falls within the limits of what would most likely be labeled "disability," both of their affective responses create a feeling of 'a present where all is shifting, crossing.' Portraying a human being that is not entombed in itself but relational and connected, Wills' description resonates with Cayce's condition in terms of a common departure from absolute autonomy. Both reinforce the conception of an extended and relational organism that, as Wills puts it, "go[es] with whatever flow flows" (1). With a similar content matter at hand, it is illuminating to see how Gibson and Wills diverge widely with regard to the mode of depiction with is partly owed to the difference between novelistic and critical writing. In Wills' we clearly do not perceive the voice of the person in pain, but we are presented with a poetic mediation of that experience by an observer. Description is thus more remote from the experience.

COPING MECHANISMS

Over the course of the novel, various forms of adjustment are presented to help Cayce handle disabling situations. One of Cayce's most problematic triggers is, she confesses, "Bibendum. That's his name. And also the name of a restaurant in the retrofitted Michelin House, where of course Cayce has never gone" (100). This short passage illustrates how Cayce aims to avoid the experience of pain and the ensuing processes of rupture and disconnection, which ultimately leads to a limitation of action. The strategy of avoidance informs her geographical whereabouts. Certain trademarks make her go to particular streets, stores, and restaurants but not others thus contributing in structuring her movements. By taking some and avoiding other pathways, Cayce works on remaining active.

Dedicated to an investigation of the forms of adjustment, and the ways in which adjustment can enable or forbid action, Winance analyzed how wheelchair-users try out and decide on their wheelchairs in her article, "Trying Out the Wheelchair: The Mutual Shaping of People and Devices through Adjustment." Grounding her observations in Latour's ANT, Winance argues that, the "action 'to move' results from the conjunction of many small impulses coming from everywhere and passing from one actor to another" (60). She concludes that "action is partly realized by the person and partly by the device" (59).[111] In her example it is the wheelchair, in mine it is the distribution of trademarks. Adjustment in this framework describes "a work on the links" in order to find the most comfortable or enabling arrangement (57). The established relations "shape the person and the device, what they are, and what they will be able to do" (57). Or more specifically, "the person is made through the interactions he or she has with other entities" (67). Adjustment is furthermore described as "a double movement of opening and closing the person's world" since certain links allow for certain activities while the lack of other links prevents other activities (64). The process of adjustment does not only entail a material, but also an emotional, adjustment. In an updated version of her notion of adjustment, Winance explains how the process of adaptation can be differentiated into

[111] This corresponds to Harrasser's notion of the "semi-sovereign body" in her discussion of parahumanism.

the reflexive process of adjustment (which is a mutual and planned adaptation between person and device/environment) and the non-reflexive process of accommodation (which describes the material shaping of body and device/environment) ("From Repair to Enhancement" 5).

The consequences of her non-normative, highly articulate sensitivity are extensive, and necessitate Cayce to adjust her life style. Cayce's sensitivity to context causes her to value everything that is void of temporal or geographical markers. For instance, Cayce's own wardrobe consists of

> CPUs. Cayce Pollard Units. That's what Damian calls the clothing she wears. CPUs are either black, white or gray, and ideally seem to have come into this world without human intervention. What people take for relentless minimalism is a side effect of too much exposure to the reactor-cores of fashion (8).

Despite the fact that Cayce carefully removes all trademarks from her clothes, every item appears almost generic such as, for instance, "the CPU Damian calls Skirt Thing, a long, narrow, anonymously made tube of black jersey, with only the most minimal hemming at either end" (53). Cayce's distinctiveness as "a design-free zone, a one-woman school of anti," stands in stark contrast to passages oozing with material details (9). Again, through a mimetic mode of description we come close to the articulate perception of a restaurant frequented by the protagonist:

> Charlie Don't Surf is full, the food California-inflected Vietnamese fusion with more than the usual leavening of colonial Frenchness. The white walls are decorated with enormous prints of close-up black-and-white photographs of 'Nam-era Zippo lighter, engraved with crudely drawn American military symbols, still cruder sexual motifs, and stenciled slogans. These remind Cayce of photographs of tombstones in confederate graveyards, except for the graphic content and the nature of the slogans, and the 'Nam theme suggests to her that the place has been here for a while (14).

In comparison to the fractured and recessive passages depicting pain, here an extension into the world and the abundance of associations in Cayce's perception become visible. This sheer density of product information, or in Frederic Jameson's words, "noisy commodities" that oftentimes suffuses Gibson's fiction explains her enthusiasm for the minimalist aesthetics of the footage ("Fear and Loathing" 114).

After the first appearances of segments online, an underground obsession sprouts and the self-proclaimed "footageheads" found the "Fetisch:Footage:Forum" for exchanging views over the nature, origin, and meaning of the mysterious fragments (*Pattern Recognition* 4). Its most exceptional attribute is the "careful lack of period markers" (59). The indeterminacy of visual information and the ostensible randomness of the segments' upload give reason for speculation and moreover cause the two diverging beliefs of it being either a work in progress (the Progressives) or a completed and individually distributed work (the Completists). The descriptions of the individual fragments resemble each other in their elusiveness of information. Consider the following descriptions:

> It opens on that rooftop, against the oddly shaped chimneys. He is there. Walks to the low parapet. Looks out toward a city that never resolves. A framegrab on what he sees would reveal only a faint arrangement of vertical and horizontal lines. No focus. Definitely a skyline but not enough information to provide any sort of identification (125).
>
> The girl wears a longer coat, equally dark but seemingly of fabric, its shoulder-padding the subject of hundreds of posts. The architecture of padding in a woman's coat should yield possible periods, particular decades, but there has been no agreement, only controversy. She is hatless, which has been taken either as the clearest of signs that this is not a period piece, or simply as an indication that she is a free spirit, untrammeled by even the most basic conventions of her day. Her hair has been the subject of similar scrutiny, but nothing has ever been definitively agreed upon. The one hundred and thirty-four previously discovered fragments, having been endlessly collated, broken down, reassembled, by whole armies of the most fanatical investigators, have yielded no period and no particular narrative direction (23-4).

For the viewer, the footage provides experience without meaning. On this fragmentary basis the footageheads relate, connect, and re-assemble the segments in order to obtain a narrative and, eventually, a sense. Whether these relations produce actual knowledge or present a case of apophenia is constantly debated in the novel. Cayce declares, "maybe you've been looking at this stuff for so long that you've read all this into it. And talking with other people who've been doing the same thing" (111). Cayce fathoms that "[t]here is a lack of evidence, an absence of stylistic cues, that [she] understands to be utterly masterful" (23). The minimalism in the setting and the protagonists' clothing make it impossible to locate the two figures depicted in each segment: "He might be a sailor, stepping onto a submarine in 1914, or a jazz musician entering a club in 1957" (23). Cayce is deeply "fascinated by its timelessness" (23). Perceived as almost outside of culture due to their a-historical and a-geographical nature, the segments' popularity increases steadily and raises the attention of Cayce's employer Hubertus Bigend, an internationally highly influential businessman and head of the Blue Ant marketing agency. Employing Cayce as a coolhunter turns out not to be Bigend's primary interest. The top player in the new world order of global corporate culture follows a his own agenda and hires Cayce to find the maker of the footage. However, Bigend admires the footage as, "the single most effective piece of guerilla marketing ever" and because of "[her] talents, [her] allergies, [her] tame pathologies" and her private passion for the footage, Cayce becomes a valuable asset (67). Despite fearing the footage getting marketed by "a nominal Belgian who looks like Tom Cruise on a diet of virgins' blood and truffled chocolates," Cayce agrees to the mission out of personal curiosity for the origin of the segments (7).

THE COLLABORATIVE CAPACITY TO ACT

In the fashion of a detective following clues, Cayce traces an array of heterogeneous actors and associations in order to identify "the maker." In *Pattern Recognition*, the footage as new innovative video art moves viewers to engage in controversies about the nature of its meaning and thus prompts the formation of a subculture of "footageheads," i.e. of groups in support of disparate theories regarding the origin of

the segments and of conflicting interest groups. Confronted with a situation in which both the range of the individuals, groups, brands, businesses, technologies, reasons, meanings, and agendas fluctuate and the connections between those actors are uncertain. Cayce cannot settle for plain cause-and-effect relationships, but by following the movement of action makes the highly complex concatenation of actors visible.

In Roland Barthes' terms, the interlinkages of characters, things, places, and events come in a "writerly" rather than "readerly" style[112] since they remain without any narrative explanation or comment and are thus not self-evident.[113] The novel's opening scene depicts how Cayce walking through Nottingham gets mistaken for a potential customer of Curta calculators by a group of street dealers. While this chance event initially appears completely random and irrelevant for the protagonist, their encounter establishes ties between the characters and thus Voytek, Hobbs, and Ngemi are incrementally incorporated in the emergence of action. As is Parkaboy, Cayce's closest friend from F:F:F. Together with yet another friend called Darryl, Parkaboy translates conversations about the footage from a Japanese website and finds evidence that segment #78 was watermarked. A finding they consider, "the single greatest scoop since footage first found web" (75). By creating, in effect, "genderbait for nerds" in the form of a fictional girl character called Keiko, Parkaboy and Darryl intend to elicit the decryption of the watermark from Taki, a loose member of a group referred to as "Mystics" claiming to know a deciphered multi-digit number (76). At the same time Blue Ant provides Cayce with partner Boone Chu, a "[h]ands-on generalist" in order to facilitate and monitor her work (105). Together they travel to Tokyo, where Cayce meets Taki to deliver a signed photograph of Keiko in exchange for the code. It is through interactions and relationships with these characters that Cayce is able to act.

In an earlier conversation Cayce turns to Voytek, who has become a trusted friend, asking

> 'you could use the watermark to follow the dissemination of a given image or video clip?' He nods. 'Who does this, the actual watermarking?'
> 'There are companies.'
> 'Could a watermark be traced to a particular company, its number?'
> 'Would not be so good for client security.'
> 'Would it be possible for someone to detect, or extract, a secret watermark? Without knowing the code, or who placed it there, or even being sure it's there in the first place?'
> Voytek considers. 'Difficult, but might be done. Hobbs knows these things' (84).

Boone finds out that it is a company called Sigil Technologies who watermark the segments and as Cayce explains, "Each of these numbers is a code … identifying a particular sequence in a piece of information. Each sequence has one of these numbers encrypted, for purposes of identification, and to enable it to be tracked" (240). Since it modifies the modalities of the input, generating a new and unpredictable output, Sigil Technologies functions as what in ANT terminology can be considered a mediator, rather than an intermediary, which "transports meaning or

[112] See Roland Barthes' *S/Z* (1970).
[113] Or in Gibson's own words: "My own pleasure as a reader of that type of fiction is being left in the dark, confused, gradually putting it together" (Sturgeon, "Nostalgia for the Future" par.13).

force without transformation" (39). Segments sent to Sigil are transformed and returned to the sender. More specifically, Sigil encrypts a multi-digit number into each segment which makes them traceable and, when taken all together, designates a location for each on an imaginary map. Following this chain of transformation, Cayce traces an actor-network, which is not pre-given but comes into view with Cayce's exploration of the footage. By means of the number from the decoded watermark she obtained from Taki, she attempts to find out to whom Sigil Technologies sent the encrypted segment to. Through Voytek and his sister Magda, Cayce learns that Hobbs is a former cryptographer and mathematician who can still locate information through his NSA "[o]ld-boy networks" (219). Knowing of his passion for calculators and his fascination with a specific collector's piece, Cayce is able to make a deal. She offers to buy and trade a valuable collectable for a tiny piece of writing; the email address Sigil sent the coded segments to. As with Taki, she counts on a person's passion and exchanges a thing for a piece of writing. Using his channels of information, Hobbs is able to provide the email address becoming an enabler of action.

What does that mean for the conceptualization of Cayce's ability to investigate, to act? Who acts when Cayce is acting? Yes, her articulated sensitivity makes her an ideal researcher, investigator and traveler and she appears to be the lynchpin of action. But, it becomes clear that without Parkaboy and Darryl's finding and ability to translate from Japanese, Taki's decryption of the watermark and his libidinal desires, Boone Chu's guardianship and investigation of Sigil Technology, Voytek's cordial support and link to Hobbs, Hobbs' connections to the NSA and his passion for calculators, and Bigend's infinite financial means and interest in guerilla marketing, action would not be possible. All of these characters follow their own interests and motivations shaping their trajectories. The events the novel presents happen at the nodes, which emerge when these trajectories intersect, and complex concatenations of actors come into being. These characters' abilities, acts and individual ties factor into Cayce's abilities and inabilities. Moreover, it is on the paths of translation processes that she travels. Taki's desire is translated into a piece of customized photo-shopped pornography and exchanged for the code. Hobbs' fascination for math and code translates into an affinity for calculators, and so on.

Despite this abundance in characters, it is not only human actors who enable action throughout the novel. In the scene when Cayce formulates the message to the Russian email address, the narrative attends to the ways in which non-human actors partake in action. The moment of sending off the message by the movement of a single finger on a touchpad and thus establishing a link to "the maker" is described as an unconscious or involuntarily act. Consider the following passages:

> Aware in just that instant of how the park distances the sound of London, giving her the sensation of existing at some still point around which all else revolves. As though the broad gravel avenues are leys, terminating at Peter Pan. The angry child's fingers, typing. *stellanor@armaz.ru* And that in the address window, as though she would actually send it. Touchpadding down menu to Send. And of course she doesn't. And watches as it sends. 'I didn't,' she protests to the iBook on the grass, the colors of its screen faint in the sunlight. 'I didn't,' she says to Peter Pan. She couldn't have. She did (267).

> Accept that it happened, she tells herself. Table all questions of intentionality. She almost feels as though something in the park had made her do it. Genius loci, Parkaboy would say. Too much sun. Convergence of lines. (Convergence

> of something, certainly, she guesses, but in some part of herself she can't access) (268).

This passage may serve as an exemplification of how human decisions and actions do not originate in an enclosed human being in any absolute sense but instead emerge from within interactions with the milieu. What Hayles with reference to this passage understands as a "gesture, taking place as a somatic action below awareness" suggests the understanding of human agency as a confluence of internal and external forces ("Traumas of Code" 146). What Gibson's figuration exemplifies is a form of collective, collaborative capacity to act. Such notion of agency permits to account for all the human and non-human actors involved in decision making and acting in the sense Jane Bennett endorses when she questions the strong autonomy of the Western autonomous rational subject.

4.3.3 Capacities of Incapacity

The negotiation of extraordinary bodies takes another twist when Cayce finally meets "the maker." In response to her message, Cayce is invited to Moscow to meet Stella Volkova, the twin sister of a former student filmmaker and then "the maker," Nora Volkova herself. The Volkova sisters come from a rich oligarch family that was the target of a bomb attack responsible for the death of their parents and their own injuries. As a result of a piece of shrapnel lodged in Nora's brain, she is paraplegic.

Echoing the narrative structure of *Idoru*, *Pattern Recognition* hinges on a character who is at the novel's grand finale revealed to have a severe physical disability. In *Idoru* it is only at the end of the novel that protagonist Chia McKenzie learns about the identity of her virtual friend Zona Rosa. Although Zona, the avatar of the Mexican girl Mercedes Purissima, has all along co-determined the plot, her identity was repressed in the narrative and her deformities are revealed only at the end. In *Pattern Recognition,* Gibson presents Nora Volkova, or "the maker," in a similar way. Rather than merely suffusing the narrative with her absent presence, the unknown creator of the footage appears as an actual driving force of the narrative. Without any material appearance or information about her identity, "the maker" prevails as an empty signifier until the final pages of *Pattern Recognition* where finally, the creative genius is unveiled as a hidden away paraplegic.

Contrary to diagnoses abiding by a linear medical model as seen in chapter 2.1, Gibson offers the portrayal of a non-linear process of recovery in the depiction of Nora's hospitalization. Like Tobin Siebers' analyses, the representation of Nora's disability negotiates pain without providing any easy solution. The gritty reality becomes visible through its acknowledgement and the requirement of an active negotiation. While confrontation with a former film project causes Nora great pain, it prompts action as well.

> The doctors had asked me her interests and of course there was only film. Shortly, we were shown an editing suite which our uncle had caused to have assembled there, in the clinic. We showed Nora the film she had been working on, in Paris, before. Nothing. As if she could not see it. Then she was shown her film from Cannes. That she saw, but it seemed to cause her great pain. Soon she began to use the equipment. To edit. Recut (298).

This scene presents a situation of collective confrontation among actors: Stella's and the doctors' willingness to provide a comfortable setting, Nora's inability to verbally communicate her needs and passions, Nora's prior artwork, her memories, her pain, her uncle's financial assets to provide editing equipment, and Nora's willingness to use the equipment. This collective confrontation and negotiation of the actor's interrelation needs to be considered a work on the person's body and the joint aid ("Trying Out" 57). Stella as sister and caretaker, the doctors, the editing equipment, and Nora work together on finding a comfortable arrangement for everyone involved. Trying out different settings entails establishing and dissolving connections, such as surrounding Nora with different doctors, presenting her with different editing equipment and different film material until she is enabled to engage. As Winance explains, "adjustment is a work on the links that shape the person and the device, what they are, and what they will be able to do" (57). Furthermore, she explains how the ties holding a person and their device are "undone to see which ones are 'rigid' and which ones are 'flexible'" (57). After Nora edits the film down to a single frame which shows a bird in flight, she "went inside" (*Pattern Recognition* 298). Stella explains and continues,

> She ceased to speak, then to react. To eat. Again they fed her with tubes. I was crazy … In the end they said they could do nothing. It could not be removed … The last fragment. It rests between the lobes, in some terrible way. It cannot be moved. Risk is too great (298).

In this case, the link between the last fragment and Nora's lobes is too rigid to be disrupted. Through this process of testing "knots appear" and some of "these knots are the ties impossible to untie or to replace" ("Trying Out" 57). Consequently, the adjustment continues aiming to make new links or attachments that as a hybrid collective take shape of something new. Stella recounts the adjustment process as follows:

> The most clever of the doctors, he was from Stuttgart. He had them put a line from that camera into her editing suite. When she looked at those images, she focused. When the images were taken away, she began to die again. He taped two hours of this, and ran it on the editing deck. She began to cut it. To manipulate … That was the beginning (*Pattern Recognition* 299).

Winance states that, "testing the links that define the person's body, actors are also testing the person's world, that is, the entities that compose it and the relations that are established between those entities" ("Trying Out" 63). The equipment is more than a mere utensil Nora uses, its status changes from "world-object" to incorporated object. Winance argues that, "the aid becomes part of the body (and the person) in the sense that it modifies the way the person perceives, moves and relates to the world" (58-9). According to such logic, the body is conceptualized as "extended" and action is "partly realized by the person and partly by the device" (61, 59).[114]

Pattern Recognition presents adjustment as a continuous process, which is facilitated through their uncle's extensive financial support and allows for situating Nora at a derelict cinema, at the site of former creative freethinkers. Through multiple

[114] Winance's observation can be read in correspondence with Clark's idea of the 'extended body' which in a similar way argues for the crucial role of relationships to non-human entities as exemplifies by patients of Alzheimer's disease (or Tuna fish).

micro-adjustments, such as choosing a suitable editing technology, finding a comfortable position for Nora and the equipment, darkening the room and so on, both strong and weak points gradually take shape and together bring about a heterogeneous collective. Moreover, Winance emphasizes that this kind of "adjustment is a double movement of opening and closing the person's world" or more specifically, that "[t]o open possibilities is simultaneously to close possibilities and to create impossibilities" (64).

The heterogeneous collective that emerges from such adjustment processes involves human as well as non-human actors. Nora is cared for by her sister who is the one uploading the video clips onto the internet. Stella explains that her sister, "is the artist" (296). Herself she considers, "[t]he distributer … [t]he one who finds an audience" (296). In this way, the distribution and delegation of action is suspended across diverse channels, human as well as technological. Upon their first meeting, Cayce finds Nora's gestures condensed to the movement of a single finger while the rest of her body is motionless. As Cayce watches pixel after pixel on "the largest LCD display [she] has ever seen" being assembled into the magical stills, she finds a first confirmation of the work-in-progress hypothesis advocated by the Progressives, one subgroup of footageheads (314). Observing how the "visual information, the grain of that imagery" is manually generated confirms the entirely computer-generated nature that footageheads assumed actually exists on the basis of the identical resolution in each of the segments (110). What seems to make this hypothesis unconvincing is the sheer intensity of the labor it requires. Following this procedure of production, each segment needs to undergo a rendering process at so-called "rendering farms". Consider the following description:

> Big room, lots of stations, renderers working through your footage a frame at a time. Labor intensive. Shakespeare's monkeys, but working to a plan. Rendering is expensive, human-intensive, involves a lot of people, and would probably be impossible to keep a secret, for very long, in a situation like this. Someone would tell, unless there are unusual constraints in place. These people sit there and massage your imagery a pixel at a time. Sharpen it up. Add detail. Do hair. Hair is a nightmare (110).

This insight into the labor-intensive demands on the production of the footage offers another glimpse into the immense density/interconnectivity of the network in which Nora is entwined. Her uncle is able to contribute the facilities, the high-end technology, the man-power, and the financial assets that enable Nora to produce the footage. In order to get Nora's clips rendered, Cayce learns, "one of Volkov's corporations decide[d] to set up a test operation, where healthy, motivated prisoners can lead healthy, motivated lives, plus receive training and career direction" (340). Thus, the inmates of an entire prison work in the service of the production of the anonymously distributed collage of film stills.

Cayce can only be understood through this connectedness with her material, psychological, and semiotic surroundings. *Pattern Recognition*'s the main character is quintessentially defined through her relationality and her dependence, rather than through a Western ideal of an autonomous subject acting upon an environment. Cayce's profession simultaneously contributes to further progressive articulation of embodiment. This implies that the refinement of her ability to differentiate is always specific and, in this respect, always partial.

From an interdisciplinary angle, the figuration of extraordinary corporeality as presented in the character of Nora reveals the negotiation of the cornerstones of the concept of disability. Gibson offers figurations to reflect on the formative processes of adjustment, the arrangement of actors into a comfortable constellation, the co-extensive character of corporeality, and the forms of distribution of competencies and transfer of action. In this regard, Winance explains that the fact that action is "distributed and delegated, is not peculiar to the case of disabled people surrounded by devices. However, in this case, the distribution is only possible through the process of adjustment, material and emotional" (60). The notion of partial control over one's body as well as one's surroundings, media studies scholar Karin Harrasser denotes as "semi-sovereign" (112). In *Körper 2.0*, Harrasser's criticism of the neoliberal ideology of the continuous improvement of the body builds on Latour's Actor-Network-Theory. The "semi-sovereign body" serves as an alternative concept to the neoliberal myth that all bodies are principally equal and differentiated by individual performance depending on individual will-power. This emphasis on how bodies are embedded in an infinite meshwork of supra-individual processes and power relations is central to her argument. (117). Nobody and nothing decides self-determinately for their exact enmeshment in a particular network. It is always partially active and partially passive processes that interlock when somebody or something acts (125). Such conceptualizations of disability differ fundamentally from the mechanico-bio-medical, as well as the social, model approach in that they do not locate disability in either the individual or society but attend to the interactional processes of all relevant actors regardless of their nature.

In *Pattern Recognition*, all of these actors (i.e. Stella, the uncle, the inmates of an entire prison, the equipment, and the internet) make a difference and are not substitutable. It is through processes of transformation that all the actors are interconnected. Nora's subjectivity/creativity is translated into black and white film segments, which are then rendered by prisoners, watermarked by Sigil Technology's staff, uploaded by Stella, and re-assembled by footageheads. It needs all these transformative processes from the raw CCTV material Nora receives to become "the footage." In the following I direct attention to one final non-human actor, which is fundamentally constitutive for Nora's extraordinary corporeality.

NON-HUMAN ACTORS

What dramatically changed the life of Nora Volkova is a piece of metal of whose biography we learn in detail:

> Something stamped out, once, in its thousands, by an automated press in some armory in America. Perhaps the workers who'd made that part, if they'd thought at all in terms of end-use, had imagined it being used to kill Russians … And somehow this one specific piece of ordnance, adrift perhaps since the days of the Soviets' failed war with the new enemies, and this one small part, only slightly damaged by the explosion of the ruthlessly simple device, had been flung into the very center of Nora's brain. And from it, and from her other wounds, there now emerged, accompanied by the patient and regular clicking of her mouse, the footage (315-16).

It is through this stark focus on the material things which both severs and connects Nora's brain that the significance and power of materiality is foregrounded in the narrative's intricate course of events. As illustrated earlier, the shrapnel severs Nora's cerebral hemispheres in a way that irrevocably changes her in ways that entail paralysis and pain. From the status of a "world-object," this piece of metal transforms into a non-human actors that is incorporated. It becomes an essential part of the organism or to use Winance's terminology, a "rigid link" is established. Without this link, Nora cannot survive. While the shrapnel is destructive in one way, it allows for a peculiar productive power in another. Here, the specificity of the material plays a crucial role since it is only due to the metallic object's conductive capacity that the communication between the brain's hemispheres is enabled and entirely new pathways of connectivity are set up. Like Jane Bennett's notion of "thing-power," this particular material-thing acts and thus plays a significant role in the production process of the footage. From this perspective, the hemispheres are connected through a piece of electrically conductive material, allowing for a discharge that expresses itself in the form of digital video clips. Cayce reflects on the fact that it is a

> T-shaped city [that] Nora is mapping through the footage … Her consciousness, Cayce understands, somehow bounded by or bound to the T-shaped fragment in her brain: part of the arming mechanism of the Claymore mine that killed her parents, balanced too deeply, too precariously within her skull, to ever be removed (315).

The cut Gibson develops in the figuration of Nora operates on three levels. First, there is the material cut through Nora's hemispheres. The re-connection and concomitant availability of new channels of interrelation inform her desire to continuously re-cut old CCTV video material, which in turn gives the resulting footage a quality of "cutting across boundaries, transgressing the accustomed order of things" (20). Acutely affected by this transgressive quality, Cayce can only point to the "[t]he feel of it"—both emotional and material quality—and stresses that the footage "matters, matters in some unique way" (78). This multilayered notion of the shrapnel as a cut as well as a link is finally symbolized by two lines captured at the moment of intersection, at the T-shape of the object. Gibson's figurations of non-normative corporeality capture the process of becoming a singular network of interdependencies and foreground the vibrant materiality involved. Nora's condition of fragmentation and yet connectedness is also mirrored in her being a twin. Stella introduced herself to Cayce as "I am twins" (296). While Nora produces the clips, the footage would not exist without Stella's distributive skills.

Drawing on Mitchell and Snyder's notion of the "capacities of incapacity," Nora's non-normative corporeality effervesces with creativity (*Biopolitics* 187). Its efficacy shows in the ways the footage is understood as utterly innovative, as "[s]omehow entirely new" and also deeply affecting the lives of others, and changing international socio-cultural structures (*Pattern Recognition* 67). Since Nora's video art "goes viral," an underground fan community forms and founds an online forum to discuss the meaning of the footage. Its impact goes as far as quickening the interest of Hubertus Bigend, who sends out Cayce as investigator.

In the figuration of Nora Volkova, Gibson develops a complex extraordinary corporeality that expresses both pain and pleasure, stasis and transformation, as contingent modalities of becoming bodies—including paraplegic corporealities. Besides the fact that the shrapnel in Nora's brain cannot be removed, and according to

medical rubrics her 'wholeness' cannot be restored, all other implications are much more ambiguous. Criticism regarding literary depictions of disability often focus on frequently depicted overcompensation of the superhuman on the one hand and on the deficiency of the subhuman on the other. Gibson's representations address problematic conditions without denying their painful realities or rendering characters to a single defining criterion. In an attempt to conceptualize non-normative bodies, Gibson circumvents unambiguous and definitive attributions of pity, tragedy, and deficit. When Cayce is granted permission to watch Nora work, the description of Nora oscillates between fascination and pathologization, admiration and empathy, and eventually the recognition of potential without any conclusive deflation into common categories: "It is here, in the languid yet precise moves of a woman's pale hand. In the faint click of image-capture. In the eyes only truly present when focused on this screen. Only the wound, speaking wordlessly in the dark" (316). The footage, as Nora's creative discharge, requires the shrapnel as well as the individual prisoner, and the editing programs as well as Stella's voice. By tracing the actor-network, Cayce makes visible that Nora is in fact not the epitome of a creative genius in any strong sense, but rather, that she is part of a hybrid collective and intricately enmeshed in a material production network. A network that, as a moving whole, brings forth the footage. Her agency is radically distributed and suspended across a multiplicity of human and technological nodes. As if to highlight the hybridity of Nora's corporeality and subjectivity, the pseudonym that ultimately leads Cayce onto her tracks, "stellanor@," fuses Nora with her sister, with technology, and with the internet. With an awareness of the artist's immersion into these interrelations, "the creative process is," as Bigend prophetically proclaims "no longer contained within an individual skull, if indeed it ever was" (*Pattern Recognition* 70). The individual skull, similar to Clark's notion of "the skin-bag," is not regarded as the singular seat of subjectivity. Clark, philosopher and cognitive scientist, advocates the fundamental embeddedness of an organism within its context. Clark holds that,

> what matters are the complex feedback loops that connect action-commands, bodily motions, environmental effects, and multisensory perceptual inputs. It is the two-way flow of influence between the brain, body, and world that matters, and on the basis of which we construct (and constantly re-construct) our sense of self, potential, and presence. The biological skin-bag [alone] has no special significance here. It is the flow that counts (*Natural-Born Cyborgs* 114).

The flow of the network facilitates a creative process that, on the one hand, shapes the identities of its actors as well as brings forth the footage. When Stella explains, Nora "is here, when she is working … When she is not working, she is not here" this foregrounds how Nora only exists in process (313). Latour underscores that,

> [b]eing connected, being interconnected, or being heterogeneous is not enough. It all depends on the sort of action that is flowing from one to the other, hence the words 'net' and 'work'. Really, we should say 'worknet' instead of 'network'. It's the work, and the movement, and the flow, and the changes that should be stressed (*Reassembling* 143).

Without the interconnection with and the flow of action between, for instance, the editing equipment, Nora's subjectivity lacks all expression. Nora does not merely use

the equipment, but it becomes that through which she acts. In the continuous process of "[m]ouse-click. Zoom. Into image-grain. Some quick adjustments. Clicks. Out of zoom" Nora is in a state of becoming (314). Watching Nora in action, Cayce is moved to tears.

Moreover, disability—when understood as a fixed and unchanging state—is no longer a productive category to assess Nora's mode of non-normative embodiment. Shildrick goes against the general assumption that "disability is a fixed and unchanging state which pre-exists its observation" in stating that "not only is disability a fluid set of conditions but that the body itself is always in process" ("Breaking the Boundaries" 436). The disabled body is a "material site of possibility where de-formations, 'missing' parts and prosthesis are enablers of new channels of desiring production unconstrained by predetermined—or at least normative—organization" ("Prosthetic Performativity" 122). In Nora's case, the shrapnel creates a universe. "[A] universe comes into being," mathematician and philosopher George Spencer Brown explains in *Laws of Form* "when a space is severed" (v). However, the cut, somewhat paradoxically, does not separate her lobes but rather enables novel ways of mediation between them initiating the extensive relations and facilitating the connections that become the very fabric of her subjectivity. The insertion of the T-shaped piece of metal significantly contributes to the emergence of something "entirely new." The footage creates, as Cayce explains, "that sense of … I don't know. Of an opening into something. Universe? Narrative?" (112).

In this chapter, I demonstrate how Gibson adopts a new realist style that allows approximating the experience of extraordinary embodiment in the moment of its emergence. Bigend trilogy approaches the topics of sensory sensitivity, paraplegia, and addiction recovery through ways that are not concerned with medical values but focus on the individual perception of the extraordinary body. In that Gibson portrays extraordinary corporeality as an experience of sensory ambivalence apropos pain and pleasure. In this way, Gibson presents novel ways to think the extraordinary body attending to its volatile materiality, its vulnerable social status, and its interrelational complexity. Gibson's narrative strategies change insofar as the extraordinary figure is no longer set against a normal counter figure in the Bigend trilogy, but against the readers' own attitudes. Revealing, for instance, Nora as the disabled artist genius only at the end of *Pattern Recognition*, Gibson bypasses readers' preconceptions of the disabled body, which commonly tend to be imbued with medical values of overcoming, compensation, and cure.

Towards the end of the trilogy the reader is no longer thoroughly informed about the protagonists' bodies in any evaluative sense. In other words, characteristics are no longer singled out or marked; instead there is a strong focus on the body's interrelation with various actors, which I have conceptualized as the formative process of the articulation of bodies. In conceiving of bodies on a level that precedes categorization via actor-network theory, my analysis illustrates how it is the emerging constellation of any number and kind of human and non-human, material and immaterial actors that determines the abilities and disabilities of a body. When abilities and disabilities become a question of enabling and disabling associations, autonomy is consequently relational. This insight prompts the call for an ethics of care, rather than cure.

5. Conclusion: Beyond the Extraordinary Body

Throughout this book I have demonstrated that Gibson puts extraordinary bodies at the heart of his work in ways that do not exploit disability as a mere metaphor for marginalized Otherness, nor in ways which serve to reassure characters (and readers) of the their own normativity. Instead, I have shown that Gibson's work challenges both the notion of the disabled and the non-disabled body to further approximate a "disability subjectivity." Moreover, I have argued that all of Gibson's trilogies occupy a defiant cyberpunk attitude through the subversion of processes of normalization on the homodiegetic, as well as heterodiegetic, level. Focusing on the Sprawl trilogy in chapter 4.1, I have delineated the ways in which depictions of prostheses and corporeal extension are grounded in bio-medical metaphors, which moreover express the values of a medical model, which conceptualizes the body in analogy with the machine which is mechanical. For this reason, the functionality and practicality of the body outweighs the hybrid status of self-identity and the sensory perception of protheticized embodiment. Furthermore, Gibson's literary style engages elements from Romantic and Gothic traditions through bio-medical technologies. This new combination results in a technoromantic style. As I have argued in chapter 4.2, Gibson moves away from the discrete body in the Bridge trilogy and begins to approach it as interrelated in social, material, and semiotic terms, thereby expanding the spectrum of factors contributing to the construction of disability and its interconnections with other subject positions. This relationality rests on the idea that the body is dependent on context—whether it be virtual data or concrete city streets—for the expression of abilities and disabilities. Moreover, I have explored culturally informed ableist attitudes and their representations in narrative situations in order to demonstrate how the clinical gaze is supplemented by staring (or the avoidance thereof) and is rather an act of communication throughout the Bridge novels. In chapter 4.3, I have demonstrated that Gibson's Bigend trilogy focuses even more heavily on the processes of the body's interrelations with human and non-human actors and thereby constitutes a new realist style. In relation to extraordinary corporeality, the Bigend novels follow an ethics of care, rather than cure.

Over the course of my main chapters, I have delineated the ways in which Gibson's thematic interests and literary styles have shifted conceptually and stylistically. The liminal position of the body between technologies of the virtual and realities of the material in his early work tends toward the prioritization of material embodiment. From Casey ("Burning Chrome") to Case (*Neuromancer*) to Cayce (*Pattern Recognition*) and beyond, this leads to the incremental corporealization of characters, the exploration of lived experience of disability, and the appreciation of the material, interdependent human body. Furthering this trajectory, Gibson develops an increasingly phenomenological language, which allows approximating the processes of the body's articulation and thus proposes a new realism of the body. In turn, the deployment of a new realist style articulates the reader and allows one to reach greater sensitivity for the lived experience of extraordinary embodiment.

GIBSON'S LATEST

Fourteen years after the Bigend trilogy, Gibson published *The Peripheral*, representing a continuation of his interests in extraordinary embodiment while also marking a stark return to traditional science fiction tropes and settings. In *The*

Peripheral, Gibson presents two futures: one of a rural America only about fifteen years from now, and the other a distant twenty-second century London. The first future follows Flynne Fisher, a professional gamer, who lives in a trailer with her veteran brother Burton and takes care of their ailing mother. Flynne lives in a society that is culturally, economically, politically, and ecologically on the decline. Civilization is just past its peak and the only well-functioning industries are those dealing with weapons, narcotics, and video games. Positioning bodies in close relation to guns, drugs, and games links corporeality less to the "medical-industrial complex" (see Ehrenreich and Ehrenreich) but rather to the "military-entertainment complex" (see McKenzie Wark).

Between these two futures, eighty percent of the world's population has been wiped out, not due to a singular event such as a meteorite, alien attack, great war, or pandemic but to a very slow and thus hardly palpable process that is androgenic. Clearly, this marks an allusion to climate change. Only the wealthiest survive what far-future characters cynically dub "The Jackpot," leaving the world in the hands of ruthless elites, plutocrats, and celebrities. In Wilf Netherton's twenty-second century London, technology is highly advanced and evokes a broad spectrum of corporeal augmentation. Contact between these two futures is established through an ominous black market technology known as the "Chinese server," which allows "continua enthusiasts" to reach into the past. To avoid time travel paradoxes, the moment of contact creates a fork in time, which causes the contacted time line to split off and become a "stub" that leads to another future. The central conflict of the novel arises when Flynne, hired to pilot a drone in what she is told to be a video game, witnesses a murder which later turns out to have been committed in the future (Netherton's present). Flynne is recruited to help Netherton solve the murder case. In turn, he assists her in setting up the assassination of the corrupt president in Flynne's present.

While some critics have celebrated Gibson's return to science fiction proper, others have criticized "how flat and attenuated his prose has become" (Winslow-Yost n.pag.). Another source of criticism lies in how simplistic the antagonists are sketched as "evil Russians who have turned future London into a kleptocracy, aided by the arch-villian, rogue 'Gulf klept' and 'fifth son,' Al-Habib" (Deb 15). Siddhartha Deb notes that it "says something about the state of the culture that such a vision of the future is produced, disseminated, and received without much in the way of critical comment in countless admiring reviews and profiles" (15). Critics interested in *The Peripheral*'s transhuman cyborgs (Suoranta 2016) or the subjects' sensory connections to technologies (McFarlane 2016) do not discuss disability despite briefly mentioning its presence in the text.

Overall, *The Peripheral* features a wild assortment of extraordinary embodiments in the distant future. The titular peripheral is a humanoid avatar, an organically engineered body without consciousness that can be remotely piloted as remotely as the past. By means of a headset, Flynne is able to operate a peripheral in Wilf's present in order to identify Daedra's murderer at a party. In line with incremental corporealization, Gibson's former visions of virtual avatars become material semi-human robots to be taken on by the characters. Another form of humanoid robots are the Michikoid, embodied AI that perform menial tasks as autonomous servants. Wilf and his contemporaries display augmented bodies in terms of incorporating communication technologies, such as phone and camera functions that are nevertheless operated by touch: "Netherton swiped his tongue from right to left, across the roof of his mouth, blanking his phone … he double-tapped the roof of his mouth, causing the feeds" (24). In the twenty-second century, embodiment is

highly technologized, though not perceived as such. Moreover, Netherton's client Daedra West is a celebrity artist whose performances consist of tattooing her skin live, then shedding it in one piece, and marketing each piece as an artifact. The human form becomes variable, even ultimately fluid as the protean, shape-shifting figures who can walk through walls, and "temporarily occupy the same space and time," explain: we are "[w]ithout fixed form" (455).

Bodies in twenty-first century are less glamorous. Ex-marine Burton suffers from malfunctioning former military cybernetic implants, "haptics" which used to pilot him remotely. The initial sentences of *The Peripheral* introduce the topics of mental disorder, military technology, phantom sensations, and disability not in a medical but in a political sense.

> They didn't think Flynne's brother has PTSD, but that sometimes the haptics glitched him. They said it was like phantom limb, ghosts of the tattoos he'd worn in the war, put there to tell him when to run, when to stand still, when to do the bad-ass dance, which direction and what range. So they allowed him some disability for that (1).

As much as post-Jackpot bodies are clean and functional, bodies in pre-Jackpot times are damaged by war. Burton's friend and former co-soldier Conner Penske[115] is constantly pitied by Flynne for the state of his body:

> He'd come back in one of the ways that she'd been scared Burton would: minus a leg, the foot of the other one, the arm on the opposite side, and the thumb and two fingers of the remaining hand. Handsome face unscarred, which made it weirder … He made her sad" (36).

Conner is equipped with 3D printed prosthetics, which, contrary to the characters of the twenty-second century, is upsetting for Conner's friends. Flynne observes herself when talking to him as, "she was talking to a boy who was half machine, like a centaur made out of a motorcycle" (55).

The Patchers, deformed cannibalistic life forms in far-future London, are depicted in a similarly pitiful and revulsive light. Patchers inhabit a future version of the Great Pacific Garbage Patch, which they "had assembled from recovered polymers" (18). Already in "The Winter Market," Gibson ponders the significance of trash for culture. Casey wonders, "[w]here does the *gomi* stop and the world begin?" and explains that "[t]he Japanese, a century ago, had already run out of gomi space around Tokyo, so they came up with a plan for creating space out of gomi. By the year 1969 they had built themselves a little island in Tokyo Bay, out of gomi, and christened it Dream Island (142-3). Contrary to the Dream Island, the island of trash in *The Peripheral* emerged from human negligence of the environment rather than from planned waste disposal. Unlike the uncontaminated, clean, tight cyborg bodies of Netherton, to the protagonist Daedra, the Michikoids, and the patchers appear utterly repulsive in their fungating, bloated, leaky, and unruly nature. He observes, one patcher's "skin was overgrown with a tweaked variant on actinic keratosis … gender indeterminate … its eyes, or possibly goggles, a single lateral smudge" (19).

[115] Featuring a character by the name of Conner in a novel entitled *The Peripheral* is hardly a coincidence for a technophile writer like Gibson who was surely aware of "Conner Peripherals," a company that manufactured data storage solutions, such as hard drives or tape drives in the 1980s, and was commonly referred to as Conner (Walsh 429).

Other patchers have "two penises" or are "six-breasted" as "modification had run rampant" (23, 25). Netherton is not only disgusted with the landscape of waste but the patchers themselves are, "[n]auseating" to him (23). As villain Hamed al-Habib explains, in their attempt to expel the patchers from the island for money, they have been infected with "endemic health issues … of which they aren't yet aware" (468). Instead of reading this eradication of non-normative or non-human life forms through the lens of eugenics, I suggest that future projects might be interested in interrogating the relationship between these creatures' deviant bodies and their synthetic and partly toxic environments. In light of recent dialogues between disability studies and environmental humanities scholar, Sarah Jaquette Ray argues in "Risking Bodies in the Wild: The 'Corporeal Unconscious' of American Adventure Culture" that mainstream U.S. environmentalism has a hidden attachment to the healthy, natural, and abled body (29). With reference to Stacy Alaimo and Linda Nash's work, Kathryn Yalan Chang argues "that the history of the environment is intertwined with the notion of disease and with the issues of social class, gender, and race" (331). Thus far, disability studies and environmental humanities have mostly developed in separation. I argue that both fields would benefit from more extensive explorations of the connections between, for instance, the environmental value of biodiversity and human variation. In this regard, scholars have suggested a variety of terms, such as "eco-ability" (Anthony J. Nocella II), "prosthetic ecologies" (Cathy J. Schlund-Vials), "eco-crip" (Sarah Jaquette Ray and Jay Sibara) and "cripping sustainability" (Kim Q. Hall) that beg for further discussion.

Gibson's latest work, *Archangel*, is his first comic book. On the basis of its graphic medium, it opens new possibilities for the negotiation of disability. At the same time, this change in medium brings to light the fundamental difficulty of depictions of disability in literature. That is, in prose anything unstated with regard to characterization and description is unconsciously assumed to be within the domain of the invisible norm. Readers do not speculate whether Theodore Dreiser's Sister Carrie (1900) walks with a limp or F. Scott Fitzgerald's Jay Gatsby (1925) relies upon medication, until they are in some way explicitly or implicitly told. For example, readers are told of Captain Ahab's prosthetic leg in *Moby Dick* (Herman Melville, 1851) and Boo Radley's learning disability in *To Kill A Mockingbird* (Harper Lee, 1960). What the reader is informed of is thus to some extent always already a noteworthy difference from the implied norm (of the society either "inside" or "outside" the text, or both) and in this way marks the character. What seems like a banal observation of the literary practice of characterization in order to facilitate or foreclose identification with a character becomes significant in the discussion of how language attaches meaning to gendered, racialized, classed, and disabled bodies. I have explained how Gibson's use of language and his literary style have shifted over the course of four decades and would like to shortly highlight how *Archangel* renews this impetus to represent the disabled and non-disabled body by means of the imbrication of image and text.

With regard to the future of cyberpunk, Sterling confidently states in a letter to John Kessel in 1985 that as a literary movement it will surely pass:

> I don't worry much about the future of razor's edge techno-punk. It will be bowdlerized and parodized and reduced to a formula, just as all other SF innovations have been. It scarcely matters much, because as a 'movement,' 'Punk SF' is a joke. Gibson's a litterateur who happens to have an unrivalled grasp of modern pop aesthetic. Shiner writes mainstream and mysteries.

> Rucker's crazy. Shirley's a surrealist; Pat Cadigan's a technophobe. By '95 we'll all have something else cooking (qtd. Kelly and Kessel vii).

All of the cyberpunk-pack has continued writing after 1995, and yet Sterling's prediction is accurate when bearing in mind the question of style. While *The Peripheral* has re-established Gibson's role as a science fiction litterateur, his literature has evolved since the 1980, thus expanded his professional repertoire of stylistic and narrative means through his latest publication of a graphic novel in 2017.

What is new about the representation of disability in *Archangel* is that it conceptually moves away from the medical deficiency of the individual, as well as the social exclusion of the individual from an ableist society, in order to examine the body's processes of interrelation as being merely one character trait out of many. *Archangel* is an alternate history story that imagines a different outcome to World War II. The story ruminates on Cold War nuclear anxiety, and centers its plot on stopping the evil Vice President in the past via time travel, or as it is called in the book "quantum transfer." Depicted as sitting at a control panel at the military quantum transfer facility, Major Guadalupe Torres is one of the main characters and is in charge of the transfer of people back and forth in time and space. As a member of an unnamed resistance organization, she tries to impede the Vice President's plan to attain global domination.

Only several frames into the story, Torres is unambiguously shown in a wheelchair. Important to the argument of this thesis, the character is not introduced as a wheelchair-user but as a military major. Contrary to the narrators' clinical gaze in Gibson's early work, for instance the ways Casey examines Lise's passive body as it is maneuvered by the exoskeleton in "The Winter Market," Torres' condition is never commented on by any of the characters. This is not out of embarrassment or pity, I argue, but because her corporeality is entirely inconsequential for the events taking place. The depiction does not frame her body as suffering from a medical disability or represent it as socially marginalized. The wheelchair is discernable in some, but not all scenes. I trace this back to its status as being no more noteworthy than other features, such as her brown hair or green clothes and not due to attempts of concealment for the purpose of passing. In effect, using a wheelchair is just one trait out of many, and a rather insignificant one in that. The only mention in the story of Torres's physique is by herself in a joke about military posture. In this scene, the military pushes their way through the bolted and barred facility and overpowers her. Thrown to the floor, she exclaims defiantly, "apologies for not standing at attention" (n.pag.)—a joke that is made not at her expense but to show her ability to mock authority.

In the afterword, outside of the narrative, Gibson provides a short resume of all characters and states with regard to Torres that "she pilots a noisy electric wheelchair and wears a brace on one leg" (n.pag.). There are two final observations that I would like to make at this point. First, learning about Torres's brace in the afterword (although it is not shown or even identifiable in any image) might challenge the implication of a "normal" body from the absence of notification. Gibson hints at the fact that her bodily variation may exist in narrative to varying degrees. The wheelchair is visible when Torres moves, though the brace is unnoticeable under her clothes. Instead of a narrative strategy or a metaphor for something else, her extraordinary physique becomes a rather insignificant character trait. Secondly, in contrast to early expressions of the use of prosthetics, for example Lise being "propped up" in her exoskeleton, Torres "pilots" her wheelchair. Once more I point to

the significance of language as the shift from a passive to an active verb form demonstrates the crucial difference in the perception of an identity (one's own as well as somebody else's) as having agency or not. Fought for by contemporary disability activist groups, Gibson's shift in language can be read in correspondence to the cultural move away from the offensive expression of being "wheelchair-bound" to instead being named a "wheelchair-user." As an expression, "to pilot a wheelchair" bespeaks activity and control, while acknowledging the enabling rather than disabling effect of the device. However, language alone does not make the body. As Segal underscores, "[t]here is no easy exchange of terms. Metaphors highlight some things and hide others and render some things obvious and some things unthinkable" (130).

Yet, I argue that in consideration of Gibson's entire oeuvre, he arrives at a new, flexible norm in his latest work. In the depiction of a female Mexican wheelchair-user, it is no longer useful to speak of disability, or even extraordinary embodiment. Torres does not express any limitation except for the inability to stand that becomes relevant only in the character's mocking of authority. In *Archangel,* Gibson resolves disability not in the eugenic sense of the eradication of impaired bodies, but by means of a changed future social and ideological world order that attends to human variation.

In closing, I would like to emphasize the potential of Gibson's fiction for disability studies discourse. Not only does Gibson's work challenge notions of the normal and the disabled body, but it provides new ways of portrayal to articulate readers' sensitivity and re-configure public perception of the human body in general. A disability-informed criticism allows for consideration of Gibson's extraordinary figurations' defiance against an ableist social order. His vocabulary and imagery encourages readers to think and speak the human body anew. From *Burning Chrome* to *Archangel*, from technoromanticism to new realism, Gibson's extraordinary bodies challenge the status quo.

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