

Theorising the Quantified Self and Posthumanist Agency

Self-Knowledge and Posthumanist Agency in Contemporary US-American Literature

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Abstract

In our paper we will examine the cultural implications of the quantified self technology and analyse how contemporary US-American novels reflect and comment on the qualitative changes of the human condition against the backdrop of an interpretive dominance held by the natural and social sciences as well as the changes effected by quantitative methods. Moreover, we will investigate some historical and cultural continuities of the quantified self within US-American culture. We claim that, although the quantified self is a global phenomenon, it has emerged from a model of subjectivity which has been deeply engrained in American culture at least since Benjamin Franklin's Autobiography (1791) and which emphasises individualism, economic self-optimisation, and a techno-euphoric belief in progress, self-control, and self-possession. In this context, the quantified self can be connected to theoretical discourses of 1) economy-driven subjectivity, 2) posthumanism and 3) knowledge cultures of the information age. Drawing on Gary Shteyngart's recent novel Super Sad True Love Story (2010), we will map forms and functions of literary engagements with various manifestations of the quantified self in relation to the cross-dependencies between distributed agency, potentials and the limits of knowledge systems, and economic mechanisms. As critical systems of second-order observation, fictional texts reflect on the repercussions of practices related to numerical self-description. At the same time, they constitute epistemological counter models to the relational, modular, and combinatory logic of the database (Manovich 2001; Hayles 1999), by focusing on the qualitative dimension of human experience and thus (re-)inscribing human agency into these "technologies of the self" (Foucault 1984).

Theoretical Assumptions

Quantified approaches to self-knowledge are not a new phenomenon. Humans have always collected and systematised comprehensive data about the world and about themselves. While the term 'the quantified self' is a rather recent coinage,

other terms signifying similar concepts have been around for some time such as self-tracking, self-monitoring, self-reporting, personal metrics (Young 2012), and in a more theoretical context, of forms of self-thematisation (Hahn/Schorch 2007). In this light, self-tracking can be traced back to early Protestantism and more specifically to Calvinism, particularly Puritanism, and also several other, earlier forms of observing oneself, such as diaries and journal keeping, autobiographies and personal letters.

What becomes immediately clear is that one needs a medium to observe oneself, that is to 'look at oneself' from outside, even if the focus is on interiority and private experiences. The beginning of modernity brought about a radical shift to the interior of one's experience (Taylor 1989) and at the same time a strong shift to externalisation of the self in the sense of relying on a medium. This necessarily implies that all forms of self-monitoring are medium-dependent and consequently at least partially codetermined by the medium or technology. This 'doubleness' is constitutive, we want to suggest, to every form of self-tracking. Therefore, if we wish to comprehend contemporary forms of self-constitution through self-tracking, we have to consider the historically decisive shift to the individual as well as the immense reliance on tools that increasingly defy individual control, as for instance computer-based appliances.

The first and most important technology that allowed for and at the same time lead to self-tracking was of course the technology of writing. Only if you have a medium that allows you to externalise and store your thoughts, feelings and experiences, is it possible to begin creating a coherent self and identity, which is always a retroactive construction. What seemed contingent when it happened is presented as necessary and brought into a linear, that is narrative, sequence only afterwards in autobiographical writing. As has often been noted, writing and the rise of the individual as a historical phenomenon are closely linked (Ong 1982). The emergence of the individual as a privileged site of social organisation is also connected to the rise of the bourgeoisie in Western and Southern Europe in early modern times and has to be understood within the context of the Reformation, the invention of the printing press and a shift in the economic as well as political/social structure. The link between economics and individualism is particularly noteworthy, and one significant moment to observe this connection is the fact that autobiography in its modern form and double-entry bookkeeping as 'genres' or forms to organise 'data' arose at about the same time. The most significant literary example of this nexus is Daniel Defoe's novel *Robinson Crusoe* (1719), in which the protagonist keeps track of his experience as well as of his possessions and "investments," in spite of his isolation on the island. Even while the concept of modernisation has been much criticised and relativised in recent debates, processes of individualisation are certainly part of the Western, European and North Atlantic version of modernisation, now understood as neither necessarily linear nor exclusively Western (Eisenstadt 2000).

Particularly the digital revolution as the most recent development in information processing technology has made the accumulation and analysis of massive amounts of data easier and affordable for the individual. Big Data has

not only enabled the functional evaluation of global economic, ecological, and social statistical correlations, but has also made it possible for the individual to extract relevant predictions from personal data. Although Big Data research has focused primarily on economic and media theoretical descriptions of effects and practical applications of these technologies (Berman 2013; Mayer-Schönberger/Cukier 2013; Schmarzo 2013; Davenport 2014), there have been few attempts so far to critically reflect on Big Data's alleged epistemological paradigm shifts from a cultural studies and cultural theory perspective. Klaus Mainzer (2014) portends that Big Data debates must be connected with a "historical foundation" in order to be able to evaluate potentials and limitations of such an epistemology in terms of the history of knowledge. Other critical perspectives on Big Data include a volume of essays entitled *Big Data: Analysen zum gesellschaftlichen Wandel von Wissen, Macht und Ökonomie* (Reichert 2014), as well as Danah Boyd's and Kate Crawford's "Critical Questions for Big Data" (2012) which point at the risks and blind spots of Big Data from a social and media studies perspective, by problematising its technological, methodical, social, and ethical assumptions.

A distinctly cultural and literary studies perspective allows for making statements that go beyond the diagnostic and descriptive level in that they reflect social implications, prognoses, and potential behavioural models. In this context, the concept of 'subjectivity' becomes a central reference point, as it emphasises the dimension of approaching and experiencing the world as a thinking, acting, and feeling subject. Since forms of subjectivities continually change (e.g. Andreas Reckwitz (2006) views processes of economicisation and aestheticisation as a part of the postmodern subject) an examination of contemporary forms of subjectivity has to account for the increasing global, technological and biomedical developments that shape and frame it.

Signalling a specific subject formation and cluster of experiences, the quantified self can thus be understood as a concept of the human which is based on numerical and statistical models. In this context, the quantified self can be connected to theoretical discourses of 1) economy-driven subjectivity, 2) knowledge cultures of the information age, and 3) posthumanism.

The quantified self is often examined in relation to economic interests, usability, and financial profit. Related to the notion of 'possessive individualism', as already drawn out by John Locke (Macpherson 1962), the quantified self is deeply engrained in US-American self-definition. Against the backdrop of a 'geopolitics of knowledge', American concepts of individualism in particular have circulated globally (Curry 1991; Ehrenberg 2012), just as distinctive forms of economic orientation have done (Tocqueville 1835/1840). Thus, there are definite connections between a certain technological drive and belief in the feasibility of self, future, self-control, economic ambition and possession (including self-possession) and the quantified self. The nexus between a particularly US-American form of neoliberalism (Brown 2003; Harvey 2005) and a subject formation which contains elements of the quantified self is key to understanding globalisation, digitalisation, and the increasing transformability of bodies.

The digitalisation of all social fields has rendered quantified conceptions of the self increasingly popular. The rapid spread of mobile technology especially has spurred a growing trend toward personalisation of applications. A concept of knowledge as economic resource in a postindustrial “information age” (Bell 1974) unveils the paradox of quantifying a non-quantifiable entity. On the one hand, digital media demonstrate that (collective) forms of knowledge are neither predictable nor ascribable to individuals (Lévy 1997; Jenkins 2010). On the other hand, they simultaneously suggest a potential of collecting, generating, and accessing knowledge through massive databases. According to Nora Young, contemporary digital culture disembodies and decontextualises and takes one “out of the here and now. It is precisely this disembodied, distracted, digital life we lead, I argue, that is creating the urge to document the physical body” (2012: 3). She claims that the extreme focus on the body has to be understood in the context of and as a response to the disembodiment and decontextualisation (in terms of space as well as time) of lives lived in constant digital communication and self-monitoring. “Self-tracking is an adaptive reaction to the pathologies of disembodiment that are part of digital culture. The core irony of this is that the persistent, documented individual self we’re trying to assert is itself an illusion. The key to repairing this illusion is the body, the very thing digital culture denies us” (ibid: 80).

The relationship between body, knowledge, and technology has been increasingly discussed in the context of a critical posthumanism (Herbrechter 2009: 7) which regards the human less as an autonomous-rational being, but rather as a node in complex networks of economic, ecological, media-related, and technological agencies (Haraway 1985; Hayles 1999; Graham 2002; Badmington 2003; Wolfe 2009). Posthumanist subjectivity is located at the intersection of the body, new media technology, and other “non-human agencies,” to use Bruno Latour’s (2007) term proposed in the context of Actor-Network-Theory. According to a posthumanist perspective, information-based and economic models of subjectivity can be seen as sites in which human and non-human knowledge intersect and elicit agencies that depend on external influences. Moreover, posthumanist theories deal with the results emerging from a fusion of biotechnology and economic interests harboured by international corporations. Following Michel Foucault and Giorgio Agamben, there is an increased focus on biopolitical discussions of human life and ethics (Braidotti 2013).

Taken together, the economic, informational, and posthumanist implications of the quantified self form a complex framework of contextual and discursive factors which need to be considered in a discussion of this social practice. Largely building on Big Data technology, the quantified self has to be considered as embedded in a digital culture which is closely linked with discourses, actors, and networks that transform society and subjects (cf. Reichert 2014: 9). In discussions that take the complexity of the quantified self seriously, fictional texts fulfil an important cultural function because they critically reflect and model human agency in an imagined yet close-to-real society which ascribes ever-growing importance to quantitative methods. Interestingly, extreme forms of technological modernisation processes in the United States always go hand in

hand with corrective positions. In other words, US-American culture has always reflected such technological developments from the perspective of second order observation. Fictional texts not only comment on the quantified self, but also offer concrete epistemological counter models. Recent studies in the field of new media, posthumanism, and the digital humanities have pointed to the structural differences between a relational, modular, and recombinatory database epistemology and a more or less linear and open aesthetic of narrative fiction (Hayles 1999; Manovich 2001). Hence, novels represent alternative forms of knowledge by emphasising the qualitative, hermeneutic dimension of human experience as well as the struggles and coping mechanisms of human existence, concomitantly showing the individual new potentials and models for making meaning. It is especially this function of literature as a field of reflection that makes it a productive object for studying the interactions and complexities of quantified subject models and its social, economic, and philosophical implications.

The Quantified Self and US-American Culture

Several aspects of contemporary forms of self-tracking through digital devices can be productively examined within the context of US-American culture. Yet while it is important to trace the cultural and social embedding of these practices and to analyse the cultural continuities, they always represent specific, contingent social practices. With regard to the development of American culture, a significant point of reference is Puritanism, a Calvinist version of Protestantism. In the first half of the seventeenth-century already, exposing private thoughts and intimate experiences in public was a common practice. Puritanism demanded a ritual of public confession, of showing contrition and going through a process of purification in order to experience sanctification and to be accepted as a righteous member by the congregation. If you have to find sinful deeds and thoughts in your life, which because of the ultimate depravity of humans is regarded as the natural state, then self-scrutiny is of the highest urgency. The practices of journal keeping and constant self-questioning serve as appropriate devices to take account of one's self. Indeed, the main step that Protestantism made to separate from (or perhaps, go beyond) Catholicism has been to abolish authorities that might question personal behaviour and intervene between God and the individual. As this process encompasses one's whole life and every single moment in it, constant self-inspection and journal writing become mandatory.

The Enlightenment in America added further dimensions which can be illustrated in the figure of Benjamin Franklin. Franklin can be regarded as a transitional figure in terms of the movement from Puritanism to modern forms of thinking. As he reports in his *Autobiography* (1791), he used a chart as a young man in which he monitored his daily success in keeping the virtues that he had set for himself as goals. The ways in which he checked them as well as the control mechanisms he used can be regarded as paradigmatic types of self-monitoring, constituting a rigid system of self-disciplining. The aim is self-

perfection, the self is seen as an instrument to be used as well as to be formed and modelled. “In many ways,” Young writes, “Franklin’s methodical approach is a how-to guide for today’s self-tracker” (Young 2012: 35).

The main difference to Franklin’s approach is that today the goal is not virtue or morality, but bodily improvement and self-fashioning (ibid: 36). Young adds, “our contemporary project of accounting for and recording our individual behaviours is really a continuation of a centuries’ old way of thinking about oneself in relation to time, made new with the widespread availability of tools to track that relationship” (ibid: 42). The decisive point is the concept of a self that can be shaped, as a project, an enlightenment experiment in perfectibility and human agency. The future is regarded as open and something that can be ‘made.’ Young refers to Charles Taylor who speaks of “the growing ideal of the human agent who is able to remake himself by methodical and disciplined actions” (ibid: 191; Taylor 1989: 159). Another important author along this line is Alexis de Tocqueville who published his *Democracy in America* in 1835/1840. In it he stresses that Americans tend to constantly do and redo things, that people are in constant motion, that there is always transition, and that nothing seems stable. He observes, “fortunes, opinions, and laws are there in ceaseless variation ...” (ibid: 536). He, or rather his translator, also introduces the term ‘individualism’ into the English language in his observations of American life: “*Individualism* is a novel experience to which a novel idea has given birth.” (ibid: 446)

The Quantified Self in US-American Fiction

As an implicit subject model, the quantified self has appeared and been commented on in US-American writing ever since Puritanism. One of the first explicit references in American fiction occurs in F. Scott Fitzgerald’s *The Great Gatsby* (1925). In its critique of the ‘American Dream’, the modernist novel broaches the subject of self-monitoring in the form of a Franklinesque list. The novel’s protagonist Gatsby grew up as poor boy in social obscurity. To lift himself up, he comprises a list of things to do daily that will help him to improve himself – rise early, read, exercise etc. Gatsby uses this list as a form of self-discipline. Even though he manages to escape poverty and to amass considerable wealth, he does not manage to achieve respectable social status. Moreover, he later employs illegal means to attain wealth and power such as bootlegging. The novel thus not only criticises the American Dream but also the belief that one can remake one’s self through discipline and self-monitoring, because the context must also be taken into account. Nevertheless, Fitzgerald’s novel ends on a more optimistic note, and its beautiful final image reinforces the idea of America as the land of hope and opportunity.

More recent works of fiction which negotiate the relationship between economisation and quantified concepts of the human body include Richard Powers’s *Gain* (1998), David Foster Wallace’s unfinished fragment *The Pale King* (2011), and Don DeLillo’s *Cosmopolis* (2003). Although only implicitly addressed, the quantified self appears as a paradoxical site between individual self-realisation

and perfection through institutional instrumentalisation. Other contemporary novels present the quantified self less as an economical, but rather as an 'informational' self. Perhaps the most prominent example is Dave Eggers's *The Circle* (2013), which depicts a dystopian world of numerical self-knowledge in a neoliberal information age in which the young protagonist Mae finds herself increasingly absorbed by a dangerous liaison of self-quantification and surveillance. Robin Sloan's *Mr. Penumbra's 24-hour Bookstore* (2013) and Joshua Cohen's *Book of Numbers* (2015) both address the rifts and interdependencies between numerical and fictional knowledge and the epistemological quests of humans that result from this divide. They represent "narratives of new media encounter" (Liu 2007) in that they stage themselves as technology's and/or new media's 'other'. Situated in a complicated field of recognition, affirmation, and critique of distributed systems of human and non-human agency, cognition, and power, these novels critically engage in a quest to reposition themselves in a new media ecology that gives increased preference to numerical and data-driven knowledge. Moreover, William Gibson's *Neuromancer* (1984) attests to a long tradition in science fiction to problematise biotechnological interventions into the human body in the context of neoliberal critique. Eric Garcia's *Repossession Mambo* (2009) is a recent example that critically reflects the biopolitical implications of body enhancement and transformation.

The focus of our subsequent analysis will lie on Gary Shteyngart's novel *Super Sad True Love Story* (2010), one of the contemporary US-American novels that explicitly posit quantified self technology in the context of biotechnological, digital, and economic discourses.¹ By connecting biological aging processes with the replacement of print through digital media, the novel correlates the quantification of personal data with human agency and value. The novel's protagonist Lenny Abramov, a melancholic middle-aged Russian American, is confronted with the economic, political, and cultural collapse of the United States, all the while trying (and failing) to establish a meaningful relationship with Eunice Park, a young Korean American woman engrossed in the materialistic hollows of digital consumer culture. Eunice's potential of invigorating Lenny via her own youth turns out to be just as futile as the promise of his employer's, the Post-Human Services division of the Staatling-Wapachung Corporation, to enable immortality through life-enhancing bioengineering.

Representing the new generation of media-savvy "inforgs" (Floridi 2010: 9) Eunice compensates her insecurity and disorientation in a dystopian and politically unstable United States with compulsive online shopping on her data streaming mobile media device. The device's absurd name "äppärät" mocks the facilitating function of the apparatus as tool, as "technological extension [...] of our bodies" (McLuhan 2001: 5). In an ironic turn on Foucault's 'apparatus', the äppärät alludes to the strategic formation of discourses, institutions, and laws

1 Parts of this analysis will be published in an essay by Regina Schober, entitled "Between Nostalgic Resistance and Critical Appropriation: Contemporary American Fiction on/of the Information Age and the Potentials of Posthumanist Narrative" (*Amerikastudien* 2016).

that exert power over the individual and over knowledge, in short it refers to “a set of strategies of the relations of forces supporting, and supported by, certain types of knowledge” (Foucault 1980: 194-96). The kind of knowledge produced by the *äppärät* consists of digital data, “buzzing with contacts, data, pictures, projections, maps, incomes, sound, fury” (Shteyngart 2010: 4), constantly mapping, retrieving, analysing, and scanning data from the user’s environment. Yet, all this data, as suggested by the intertextual reference to Shakespeare’s *Macbeth* create “a tale / Told by an idiot, full of sound and fury, / Signifying nothing” (Act 5, sc. 5). The *äppärät* becomes a technical interface that absorbs both contextual data as well as the user’s consciousness, limiting the realm of experience to immediately ‘translatable’ code and thus rendering it completely useless. “The world they needed,” Lenny scorns the young generation’s media dependency, “was right around them, flickering and bleeping, and it demanded every bit of strength and attention they could spare” (Shteyngart 2010: 84). Lenny condemns a media environment in which the *äppärät* is not only an ‘extension of man’ but also ‘his’ amputation. By reducing human perception exclusively to the binary information readable to the smart machine, the *äppärät* confines both physical and emotional processes of human consciousness within the technological apparatus of its own epistemology, thus metonymically representing the increasingly informational processes of knowledge production based on search engines.

Shteyngart’s *äppärät* exemplifies how quantitative self-knowledge not only leads to (self-)alienation but also potentially facilitates data surveillance and political discrimination. Humans, in Shteyngart’s dystopian world, are defined and measured by a data ‘profile’, which reduces personal information to a database automatically generated by the *äppärät*:

“LENNY ABRAMOV ZIP code 10002, New York, New York. Income averaged over five-year-span, \$289,420, yuan-pegged, within top 19 percent of U.S. income distribution. Current blood pressure 120 over 70. O-type blood. Thirty-nine years of age, lifespan estimated at eighty-three (47 percent lifespan elapsed; 53 percent remaining). Ailments: high cholesterol, depression [...]” (ibid: 88)

Not coincidentally, Lenny’s credit ranking, extracted from so-called “credit-poles,” is followed by his health record. In Shteyngart’s neoliberal dystopia, digital health data is just as valuable as one’s credit information. Both are part of a particular knowledge discourse that favours quantifiable over qualitative information, evaluating a person’s (credit/health) well-being and thus their ability to contribute to America’s survivability in an environment of external threats. In the quantified-self logic, observational procedures of the natural sciences like ‘measuring’ and ‘tracking’ become predominant tools for understanding and ‘mapping’ the human body. This data is easily decontextualised, relatable, and thus subject to (potentially misleading) correlation. Both Lenny’s financial and health data are announced first in absolute, then in relative terms that compares Lenny to the statistical average of the entire population. Individuality becomes a set of statistics, a person’s character defined by credit ranking, a person’s

body by its health status. Easily broken down, assembled, accessed, and put in relation to one another in the modular logic of digital media, this data purports to give quick access to a human's worth in relation to the entire population; the worth of being young and financially successful, thus carries highest potential for consumer capitalism that values healthy, i. e. productive 'individuals'.

Not only does the wish for uniformity neglect the fundamentally diverse, multiple, and process-oriented nature of human identity, but it also neglects the obscure and ambivalent modes of embodied human experience and behaviour that elude the clear binary logic of data. Steven Shavero notes that if "selfhood is an information pattern, rather than a material substance," the notion of individuality is at risk, since "the network induces mass replication on a miniaturized scale and [...] I myself am only an effect of this miniaturizing process" (2003: 13).

In such a numerical and calculable world in which everything and everyone can be tracked, mapped, and measured, *Super Sad True Love Story* expresses a nostalgic yearning for 'essentially human' attributes that seem to elude such systematic binary logic of access/non-access. It may not be surprising that the title *Super Sad True Love Story* ironically alludes to the 'core' human emotion of love. Lenny momentarily succeeds in finding what he considers 'true love' in his relationship with Eunice, within an environment in which love is dehumanised by entirely functional definitions as a physical process that, as Lenny's boss Joshie argues, "is great for pH, ACTH, LDL, whatever ails you" (Shteyngart 2010: 64). Despite its posthumanist theme, the novel issues a decidedly humanist message in the end when Lenny revises his initial decision to never die. Such a claim which is put to the test in the novel immediately evokes associations with the theory of transhumanism, whose most prominent belief is that humanity is still in the process of evolution. This evolution can and should be then facilitated by any technological, medical or chemical means (Transhumanist FAQ). In this sense, the "post" in the novel's version of "Post-Human" (Shteyngart 2010: 3) needs to be understood as a signifier for the evolution of mankind past its currently limited and frail state, which is why Lenny's initial decision carries a lot of weight in the overall structure of the plot. As a "Life Lovers Outreach Coordinator (Grade G) of the Post-Human Services division" (ibid: 3), Lenny is in charge of promoting and selling a service product which promises to prolong life indefinitely. This promise is based on advancements in the field of biomedicine and technology, which include methods to modify, repair, and transform the human body. Pitching their product to a potential customer, Lenny explains

"I painted him a three-dimensional picture of millions of autonomous nanobots inside his well-preserved, squash-playing body, extracting nutrients, supplementing, delivering, playing with the building blocks, copying, manipulating, reprogramming, replacing blood, destroying harmful bacteria and viruses, monitoring and identifying pathogens, reversing soft-tissue destruction, preventing bacterial infection, repairing DNA." (ibid: 122)

This passage is only one example for the way the issues of life, mortality and sickness are approached and potentially solved by the medical-industrial complex

dominating US society in *Super Sad True Love Story*. It speaks to a concept of the human as a subject whose embodiment is no longer an unchangeable and natural fact, but has become a vehicle which can be repaired, modified, and preserved using the knowledge generated by pumping immense sums of capital into scientific research. The message is that having “A so-so body in a world where only an incredible one will do.” (ibid: 3) no longer poses an insurmountable problem, the slight caveat being that this only holds true for those individuals who possess the necessary credit score and financial assets to qualify for that option in the first place.

It is clear that the scenario presented here is one dominated by quantification in all areas of life and society. It goes without saying then that in order for a customer to be accepted into the care of the “Life Lovers Outreach division” (ibid: 122), an incredible amount of quantifiable data needs to be collected, interpreted, and tested. Lenny inhabits a peculiar position, as he himself has hopes of being accepted into the program and living forever. Therefore, he simultaneously performs the same tests on himself that he is required to conduct with his customers. This includes regular fitness and stress tests, as well as measuring and publicly displaying “our methylation and homocysteine levels, our testosterone and estrogen, our fasting insulin and triglycerides, and, most important, our ‘mood + stress indicators’” (ibid: 56). Employees and customers are also expected to take care of themselves by living a healthy lifestyle, which requires accepting the corrective on individual agency offered by quantification and results in people forcing themselves to count calories, measure fats and trans-fats, and avoid alcohol and other harmful substances. The resulting “scent of immortality” consists of “a curious array of post-mortal odors, of which sardine breath is the most benign.” (ibid: 53). This of course is an observation that already hints at the problem behind the constant monitoring of bodily functions: the boundaries between life and death become increasingly blurred.

While initially it seems that Lenny and his contemporaries could adjust to this situation, the implicit and explicit critique of quantification and posthumanisation becomes louder and more pointed as the story progresses. As Lenny points out to the reader, even some of the high net worth customers he deals with are “ITP, Impossible to Preserve” (ibid: 16), and the rigorous and strict testing he conducts follows its own logic. “You had to *prove* that you were worthy of cheating death at Post-Human Services. Like I said, only 18 percent of our applicants qualified for our Product. That’s how Joshie intended it.” (ibid: 151) Indeed it is Lenny’s boss, Joshie Goldman, who most openly displays the mindset that dominates society and culture in the not-so-distant future and who serves as an example for the possible repercussions of making decisions solely based on quantifiable data. Joshie, whose imagination and drive are heavily influenced by golden age science fiction (e.g. Isaac Asimov) (ibid: 215), is the embodiment of transhumanist ideas. Joshie sees Lenny’s humanist mindset as the main reason for Lenny’s failure to achieve his goals. As he puts it, relying on the humanities and cultural values is what is holding him back, “it’s the Fallacy of Merely Existing. FME. There’ll be plenty of time to ponder and write and act out later. Right now you’ve got to *sell to live*.” (ibid: 65 [original emphasis]). It is this need

and desire to sell which explains the seemingly arbitrary acceptance rate of 18 percent that was installed by Goldman and on which he based the philosophy of his company. Simply put, it keeps the demand for his product high and leaves room for an expansion of customers by increasing that rate. Furthermore, Joshie is not simply interested in selling, he wants to be among the first people to benefit from the revolutionary procedures developed by his company. That is why he willingly modifies and changes his body, evolving into a younger version of himself. By undergoing a variety of procedures, Joshie is transformed into “a thick young mass of tendons and forward motion” (ibid: 215), a body consisting entirely of “new muscles and obedient nerve endings” (ibid: 220) who does not shy away from telling Eunice about plans to have his own heart, the “idiotically designed” (ibid: 293) muscle, removed altogether.

Ultimately it is Joshie’s fate, juxtaposed with Lenny coming to terms with his own mortality and his success as an author that drives home the implied criticism of a culture of quantification and posthumanisation. Joshie, the passionate anti-humanist, is shown to be plagued by the side effects of his life extension treatment, which reduce him into a drooling mass unable to control his facial contours who regretfully admits that all of the procedures his company developed did more damage than they did good. Thus, his final words are, “In the end, nature simply would not yield” (ibid: 327). What this also demonstrates, of course, is the fallacy in Joshie’s logic, in which he valued the selling of his product higher than the development and the allocation of proper time frames and testing. Put differently, the novel here reveals the dangers behind an economically driven science that pushes the boundaries of humanity without anyone thinking of the consequences, because there simply is no time to read, write, and reflect.

As the precarity and sensitivity of knowledge about your own body shows, *Super Sad True Love Story* proposes that sometimes it is best to not know at all, repeatedly pointing out the benefits of what popular wisdom considers ‘ignorance is bliss’. As Peter Wehling has noted, an increasing mass of knowledge in the information age makes obvious the limits of the value of information and knowledge, rendering not information but non-information and the right not-to-know as increasingly valuable factors for retaining agency (2009: 96). Lenny, who is increasingly irritated with the intrusive quality of “smoky data spilling out of a total of fifty-nine äppäräti” (Shteyngart 2010: 90), finds his recluse in Italy. Returning to its narrative starting place, the novel mockingly leads Lenny to the birthplace of the Renaissance to find his own ‘cultural rebirth’. Here, he yearns to return to a pre-digital silence, to find “a place with less data, less youth, and where old people like myself were not despised simply for being old” (ibid: 326). Yet, Lenny has to realise that globalisation leaves no such refuges. Invited to a dinner party he has to witness how “the Italians were having a go at it” – how the culture he had previously idealised for its clinging to traditional values is in the process of Americanisation, yearning for a culture of youth slang and empty data obsession.

Lenny might not have found the peace he was looking for, but at least temporarily, he is given a break. “For a while at least, no one said anything, and

I was blessed with what I needed the most. Their silence, black and complete” (ibid: 329). Concluding with this final sentence, the novel indeed leaves an almost reassuring void which functions as a sense of closure – a narrative closure which is all the more effective and meaningful in a world of unceasing data flows, endless mapping, and a desensitising persistence of information availability. The knowledge that *Super Sad True Love Story* and the other novels suggest as an alternative is the knowledge of when to stop, when to unplug the endless spills of data that surround us.

Conclusion: The Quantified Self and the Function of Literature

Super Sad True Love Story negotiates the effects of a culture obsessed with digital and thus quantifiable data on human experience and (self-)definition on the level of fictional exploration. It questions the validity of the quantified self movement to locate the human in the informational realm of digital data and thus maps possible consequences of an informational knowledge for conceptions of the human. In a self-reflexive move, the novel experiments with the malleability of language as influenced by and resisting digitalisation. The frequent use of neologisms (“Life Lovers Outreach Coordinator”; äppärät; High Net Worth Individuals; “UnitedContinentalDeltamerican”; “AlliedWasteCVSCitigroup”; “AssLuxury”) points to the need to find a new language for a new media environment, while satirically expressing the emptiness and non-originality of such recombinatory compounds which exemplify the shifting flows of capital, ideas, and people. *Super Sad True Love Story* idealises the purity of children’s language as an unspoiled and ‘authentic’ form of ‘human’ communication before it evaporates into the illiteracy of a youth culture determined by the surplus of data and visual images. Lenny describes the experience of strolling through his New York neighbourhood, “I relished hearing language actually being *spoken* by children. Overblown verbs, explosive nouns, beautifully bungled prepositions. Language, not data. How long would it be before these kids retreated into the dense clickety-clack äppärät world of their absorbed mothers and missing fathers?” (ibid: 51).

Not only is the contrast between “language” and “data” associated with a loss of innocence, but also with the loss of parental guidance and responsibility. For Lenny, America’s economic decline is thus not so much a question of ‘word casing’ and semantic shift, but the result of political failure on the part of the American government. Lenny’s anger towards the hypocrisy of books is at the same time a frustration with a dying America. After the total incorporation of America by foreign creditors, Lenny’s books feel “cold to the touch” (ibid: 321); they are just as frail as the old people that are forced out of his building. Death becomes a favoured option, one that carries more value than the ‘almost dead’. An art opening, paradoxically staged as a welcoming party for the Chinese central banker, brings the cruelty of the not-letting-go to the fore, showing ghastly images of tortured or soon to be murdered people who are forced to stay alive and thus witness the hopelessness of their existence. “Dead is dead,” Lenny laconi-

cally comments on the artworks, “we know where to file another person’s extinction, but the artist purposely zoomed in on the living, or, to be more accurate, the forced-to-be-living and the soon-to-be-dead” (ibid: 315-316). “America 2.0” does not equal a ‘new America’, as the American Restoration Authority (ARA) suggests, but only an artificial life-prolongation of an already dead patient.

Yet, Lenny’s proclamation “*I am going to die*” (subverting his initial echo of his company motto “*I am never going to die*” (ibid: 1)), metafictionally connected with the decision that this will be his “last entry” (ibid: 302), is not actually his last entry. Like America, he is kept alive, yet yearning for “silence, black and complete” (ibid: 329). So can this desire for silence be read as a yearning for the end of fiction? Here, the novel’s self-ironic gesture creates another ambiguity: it does not (want to) settle between an awareness that the great narrative of ‘America’ no longer exists, that what has been known as America has capitulated to the dehumanising logic of a media-driven hypercapitalism and cannot be rescued, yet at the same time there is a quest for self-preservation, for believing in the power of narrative to recreate a sense of national identity. In this way, *Super Sad True Love Story* gives the perhaps most paradoxical answer to the question of what function (American) fiction can have in a global information age. *Super Sad True Love Story* demonstrates that if the human is not regarded as necessarily being threatened but rather supplemented and enhanced by technology, then the same may be true for (print) novels. If “what’s missing [in the network society] is what is *more than information*: the qualitative dimension of experience or the continuum of analog space in between all those ones and zeroes” (Shaviro 2003: 249), the novel may fill exactly this blank space, retrieving the intangible and uncategorisable voids left by digital information.

Literature has played a crucial role in reflecting ideologies and practices of quantification, self-tracking and the seemingly universal sovereignty of interpretation attributed to numbers, information and data. While the dominance of a binary logic and abstract, relative, and absolute data has exponentially increased in recent years, both a belief in and a strong scepticism towards quantification has been a crucial factor in American culture. Gary Shteyngart’s *Super Sad True Love Story* is an example of how contemporary fiction negotiates measures and techniques that aim at quantification and its economic or political application. Whether it is the constant streaming of data through the ‘*äppäräti*’, the public accessibility of even the most private and personal information (e.g. sexual preferences and hormone levels) or the universal presence of the credit poles broadcasting the financial situation of every citizen, and thus their “worth” as human beings, into the world: the individuals presented here are constantly being harassed, evaluated, and hounded by the promise of objectivity inherent in numbers and data. As a techno-dystopia, the novel demonstrates the numerous pitfalls that are either caused by a too rigid dependence on numbers (e.g. the life extension program, excessive consumerism) or cannot be avoided despite them (e.g. the collapse of the US economy and social structure, medical repercussions of life extension), reminding the reader that a “culture of quantification” is not something that should be embraced without careful reflection and consideration.

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