

Science, Sexuality, and the Novels of Huxley and Houellebecq

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Angela C. Holzer,

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Abstract: In her article "Science, Sexuality, and the Novels of Huxley and Houellebecq," Angela C. Holzer begins with an introduction to recent discourse about contemporary culture by Francis Fukuyama, notably in his book *Our Posthuman Future* (2001). Next, Holzer introduces twentieth-century literary representations of genetic engineering. Focusing on Huxley's *Brave New World* (1932) and on Houellebecq's *Les Particules élémentaires* (1998), Holzer discusses differences in "utopian" literature when linked to metaphysical aspects of reproduction and that are owing to changes in the life sciences and medicine. Further, Holzer explores the implications for poetics resulting from scientific developments and relates Houellebecq's perspectives to Zola's idea of the "experimental novel" and to Nietzsche's notions of science. Holzer traces Houellebecq's text and its "reactionary politics" to Romantic literature and the late nineteenth-century discussion of marriage, Christianity, and reproduction in Tolstoy's writing. The insight to be gathered is the interrelation between the development of modern science up to the completion of the Genome Project and its impact on poetics (i.e., on form) and on representation (i.e., content) of science and the scientist in the two novels at hand.

Angela C. Holzer

Science, Sexuality, and the Novels of Huxley and Houellebecq

In his 2002 book, *Our Posthuman Future*, Francis Fukuyama tries to rehabilitate the notion of history that he had considered void thirteen years ago. Then, he had interpreted the collapse of socialist regimes in Central and East Europe as a verification of Hegel's remark in his *Phänomenologie des Geistes*, namely that the enlightenment and individual liberty as universal *Selbstbewusstsein* marked the end of history. The principles of the enlightenment that lead to liberal democracy by way of asserting inalienable and essential natural rights (ideally) for all human beings seemed to have won over the totalitarian attempts of the twentieth century. Now Fukuyama argues that as long as there is no end of science, there can be no end of history, and this is the correcting claim in his new book. As Fukuyama points out, the nazis undertook cruel biological investigations, eugenics, and afterwards those medical manipulative attempts have been discredited; nowadays the discussion about the ethics of biological and genetechnical research resurfaces, albeit under different circumstances. In dystopias such as Orwell's *1984* and Huxley's *Brave New World* we encounter considerations of nightmarish implications of modern technology from different angles. But only the author of *Brave New World* considered the possibility of a "human" race engineered in a hatchery, produced on an assembly line, manipulated with chemical substances, and bokanovskified by cell division. In Huxley's *Brave New World*, Bokanovsky's Process is the name for creating a number of identical twins out of one egg cell. The women in the story donate their ovaries for the "good of society" and the equivalent of "six months's salary" (5). Fukuyama's analysis of the possibilities of biotechnology is not a sci-fi text; even if there is profound uncertainty of what will soon actually be possible, debates about the philosophical and ethical implications of biotechnological manipulation -- including cloning, genetic enhancement, scanning for diseases and treatment -- abound.

There are some problems we have here: not with Fukuyama's notion that the definition of "human," and thus the ideal of human organisation will change with what becomes possible for humanity. Icarus paid for his dream to fly, it then was supposed to be hubris. No one would affirm today that to fly with an airplane, essentially, would be against human nature: humans have tried and have become more what earlier cultures attributed to gods. In my view, the problem is that Fukuyama, while correctly stating that there could be a price to pay, seems to consider liberal democracy the ideal of human organisation and the failure of totalitarian regimes the self-reassertion of essentially natural liberal rights and dignity in humanity. While this is a valid and supportable view, it is ideological, as all political evaluation has to be: and, moreover, he seems to see the principle of liberal democracy embodied in the West, which can also be disputed. It will become difficult to assert rights on a basis of "human nature," when exactly that nature can be improved to the advantage and disadvantage of the population or an elite thereof. However, Fukuyama begins his book with an analysis of *Brave New World* and of *1984* and states, correctly, that the first was more accurate in terms of its predictions. Neuropharmaceutical and genetic manipulations of lives are trends far more probable and already at work than enforced oppression. Huxley saw that a society of equals would never work but that genetic changing of human features does not necessarily have to lead to equal individuals. In his caste system, only the lowest class is identical, while the higher classes are individualised. All, however, are subject to regulative reproduction and products of the same.

A more recent text, Michel Houellebecq's *Les Particules élémentaires*, has hit two nerves: first, in his novel Houellebecq envisioned an ambivalent future world of eternal, asexual, and genetically identical (that is, politically probably equal) "gods" as a logical consequence of the rise of modern science, materialism and individualisation, which reached its final state during the last decades; secondly, the novel condemns the emancipatory and (sexually) liberating ideals and practices of the 1968-generation and takes one-dimensional stock of the social change initiated then. Sixty-six years lie in between the publications of Huxley's *Brave New World* in 1932 and Houellebecq's *Les Particules*

élémentaires in 1998. Both novels, set in future London and contemporary France respectively, deal with the world from a European perspective, both consider America to be the precursor of the negative trends they condemn. For Huxley, who said to have received inspiration from a trip to California, modernity in the U.S. was marked by mass production and the private pursuits of pleasure. Fordism and Ford function as a god-like figure, represent materialism and mass consumption in *The Brave New World*. The application of mass production methods to biology finds its central symbol in the assembly line of the London Central Hatchery in 632 AF; the intrusion of capitalism and pragmatism into the private sphere, thus, the elimination of privacy, dignity and humanness, which is the target of Houellebecq, prefigures in Huxley's novel. In the 1990s the market-principle of an unrestrained capitalism without corrective has led to complete instability: even the private and intimate sphere has become subjugated by competition. In short: in both novels, the individual, the free subject, divided into body and spirit as the idealist and enlightenment philosophy envisioned it, has been subjected by either state regulation or market economy. It has lost its spirit and sold its body. It has been shattered and the pursuit of happiness -- relief from pain, sexual, material, and individual fulfillment -- has contributed to the human disasters portrayed by both writers, albeit differently.

Whereas Huxley masked his view of the potentiality of modern society in the traits of a full-fledged, satirical portrait of a completely futuristic global state, Houellebecq's novel offers only glimpses at the "utopian" organisation while focusing on the decline of the present West. The mode of representation has changed; it has almost been reversed. Huxley's hell is the dystopia of a possible but remote future world, in which the trends of a modernity relying on technology and the pursuit of eternal pleasure and youth are magnified; Houellebecq's hell is set here and now. The inherent unhappiness and disorientation produced in individuals through the combination of capitalism, materialism, and the lack of moral restraints has already taken place and almost reached its conclusion. It must inevitably lead to humanity's self-destruction. Houellebecq's wishful world of eternal, asexual, genetically identical, and identically happy gods is void of conflict. Huxley, portraying an inhumane pleasure society, wrote his novel (despite Montage techniques) in a more conventional manner, the tone of his satire is lofty, playful, and sardonic. Houellebecq's construct is more complicated, integrating different discourses, prose styles and time levels; the tone of the narrator, though supposedly member of a happy, paradise-like society, is thoroughly depressed, laconic. The narrative frame of *Les particules élémentaires*, evoking the impression of *relato refero*, of being an account of an authentic event with prologue and epilogue, is homage to humanity. We are presented with a historical novel of the future, strictly speaking not with a dystopia or utopia. The driving force of the decline in Houellebecq's novel is the "last remaining myth of Western civilization" where "sex was something to do; something expedient, a diversion" (109). Huxley had foreseen the increase in promiscuous behaviour; it is a major factor of stability in his *Brave New World*. Sexuality, separated from reproduction, is a commodity there, ideally purged of emotions. In a montage of scenes and voices that introduce us to the future global state and its ideology, the World Controller Mustapha Mond, addressing students, ridicules the dated concept of the family. "Mother" and "father" have become shameful, unpronounceable words. Not only are his remarks of an expository nature for the reader, but also serve as signs of satirical reference to Freud. Acknowledging that culture is based on *Triebverzicht*, Freud wrote "Aber wie undankbar, wie kurzsichtig überhaupt, eine Aufhebung der Kultur anzustreben! Was dann übrig bleibt, ist der Naturzustand und der ist weit schwerer zu ertragen. Es ist wahr, die Natur verlangte von uns keine Triebeinschränkungen, sie ließe uns gewähren, aber sie hat ihre besonders wirksame Art uns zu beschränken, sie bringt uns um, kalt, grausam, rücksichtslos wie uns scheint, möglicherweise gerade bei den Anlässen unserer Befriedigung" (*Zukunft einer Illusion* 22).

Les particules élémentaires suggests similar thought as Huxley's but without questioning the notion of nature vs. culture: the destruction of moral and religious inhibitions has led back to a war of all against all, on the basis of a market economy of the body. Especially, even exclusively, the human

male is a source of brute aggression. The scenes in the *dortoir* -- reminding the reader of Robert Musil's *Die Verwirrungen des Zöglings Törless*, a text itself at the border of modernity and confronting the doubts of the protagonist and the insight into the irrational, abysmal axioms of the rational system of mathematics/physics -- illustrate this. Houellebecq's chapter -- entitled "L'animal oméga" in the French original and "The Omega Male" in the English version -- juxtaposes action and reflection: it is interspersed with passages that elaborate (in the jargon of a biology book) on the behaviour of animals. Houellebecq's protagonist Michel, after having discussed Huxley's recognition of the importance of biology as driving factor in society and the suffering connected to desire with his half-brother Bruno, muses: "When you think about it, sexuality has to be an absolutely evil force" (139). This sentence, as such central to the dynamics and the plot-development of the novel, is also an intersection of Christian and traditional bourgeois ethics, which will have to be investigated. Marion van Renterghem summarises the objections the novel encountered upon its publication in France in 1998: "Roman 'réactionnaire,' au sens où le diagnostic de la société contemporaine y est celui de relations humaines abimées, atomisées par la libération de 68, où l'obsession malheureuse du plaisir sexuel est un signe du repli individuel, où le désir et la liberté ne sont que sources de souffrance" (14). Individualism and personal liberties have lead to a catastrophic deprivation of humans, to inhumanity. Is this the liberal democracy, Fukuyama feels is threatened? If so, and especially in combination with a capitalist economy, the protagonists of the novel would not want to defend it; to the contrary, Michel, the scientist, is the prophet of the future genetically happy world.

Another major point of criticism has been Houellebecq's vision of reality. Phillippe Sollers, author and the (former) editor of *Tel Quel*, who is heavily caricaturised in the novel, defended the freedom of literature "à transcrire le réel" against the reductions "d'une oeuvre d'imagination à des positions idéologiques" (12). Having already discussed some of the political and ideological implications of the novels, this paper will aim at discussing the aesthetic methods and reflections of both novelists, and, especially in the case of Houellebecq, linking them to the development of physics and the importance of Modern science for his literary style. In a third part, the ideology of reproduction and sexuality will be confronted.

Style, Genre, and Generic Problems

Houellebecq writes in his collection of essays *Interventions* that "pour tenir le coup, je me suis souvent répété cette phrase de Schopenhauer: 'La première -- et pratiquement seule -- condition d'un bon style, c'est d'avoir quelque chose à dire.' Avec sa brutalité caractéristique, cette phrase peut aider" (53). Without the imitation of passions and interaction, the reason for the ancient Platonic verdict against poetry, then meaning epics and tragedy, no literature is conceivable. Of course, "quelque chose à dire" is general and begs the discussion of subject matter; but the quote leads us to a first insight. Form, for Houellebecq, is a result of matter. This is why Watson in *Brave New World* has the impression to write but not to say anything. Being employed in the Bureau of Propaganda, he muses: "I'm thinking of a queer feeling I sometimes get, a feeling that I've got something important to say and the power to say it -- only I don't know what it is ... I feel I could do something much more important. Yes, and more intense, more violent.... Can you say something about nothing? That's what it finally boils down to" (70). It is for giving a poem about solitude to his students that Helmholtz gets into trouble with the authorities later on. Loneliness is a crime in Huxley's *Brave New World*. The World controller Mustapha Mond clarifies the reality-art relationship in a conversation with the Savage John, whose auto-education consists of Shakespeare (metonymically the measure of art and culture in the world before Ford). The latter asks, supported by Watson, why the inhabitants of *Brave New World* would not understand *Othello*: "Because our world is not the same as *Othello's* world. You can't make flivvers without steel -- and you can't make tragedies without social instability. The world's stable now. People are happy; they get what they want, and they never want what they can't get. They're well off; they're safe; they're never ill; they're not afraid of death; they're blissfully ignorant of passion and old age" (220). What follows is an enumeration of the most important characteristics that created the

"stablest equilibrium in history" (227).

The contradiction is inherent in Mond's answer: when the population is not capable of grasping the significance of old high art and religion, why is censorship necessary nevertheless? Happiness makes art superfluous. In Houellebecq's aesthetics, unhappiness poses serious problems, especially for the novel as artistic expression. Houellebecq's narrator in *L'Extension du domaine de la lutte* also reflects upon the literary and genre implications of the change in human relationships already in present societies: "This progressive effacement of human relationships is not without certain problems for the novel. How, in point of fact, would one handle the narration of those unbridled passions, stretching over many years, and at times making their effect felt on several generations? We're a long way from *Wuthering Heights*, to say the least. The novel form is not conceived for depicting indifference or nothingness; a flatter, more terse and dreary discourse would need to be invented" (Houellebecq, *Whatever* 40). Whereas social stability and a collective consumerist society in *Brave New World* do not allow for passions and solitary undertakings as defended by John "the Savage," human isolation, the impossibility of fulfilling meaningful and satisfactory social relationships is a threat to literary representation in Houellebecq's writing. Each novel reflects inherently upon its own impossibility, and still, paradoxically is among the widest read and most popular of its genre. The conditions of contemporary societies -- that is, European and American ones -- are, according to Houellebecq, characterised by "un manque monstrueux et global (qu'on peut voir comme affectif, social, religieux, métaphysique)" (*Interventions* 56.) But not only is there a lack of positive matter; also the medium has lost its immediacy, and value, or, as he terms it, its "innocence": "On peut désigner comme *innocente* une représentation ... qui prétend simplement être l'image d'un monde extérieur (réel ou imaginaire, mais extérieur); en d'autres termes qui n'inclut pas en elle-même son commentaire critique" (*Interventions* 72; author's italics). The metaphor, also sexually connoted, marks a longing that reaches across language into social relations: language, having (almost) become devoid of meaning, or better, implying its own ironization and instability of meaning, is (intra-textually) an instrument of indoctrination in *Brave New World*. It is the last residue of rebellion for Houellebecq. However, for him, not l'art pour l'art aesthetics, complete refusal or silence (Blanchot) is the answer to the misère of the momentary metaphysical void. Houellebecq regards literature as the only sphere which can still guarantee *non-utilité*, that is, defend itself against the principles of the market, not by refusal, but by destructive activism: "la littérature doit se défendre absolument d'être socialement utile" ("Entretien" 8).

The task of the novelist, then, is to undermine optimistic social myths and convey reality critically. To a certain extent, especially socio-politically, it would be possible to link *Les Particules élémentaires* to a (French) tradition of realism. The novel has the task to put "le doigt sur les plaies" (*Interventions* 111) and thus condemns the writer to play "un rôle antipathique." Being aware of the split inside language, its loss of innocence that has occurred with the nouvelle critique (and earlier, in fact, with Nietzsche's notion of language as pure metaphor), the credibility of literary representation is at stake. The result is "incommunicabilité" which is not solvable on a stylistic plane alone anymore: "l'expression directe d'un sentiment, d'une émotion, d'une idée était devenue impossible, parce que trop vulgaire ... il est devenu difficile d'écrire un roman honnête, dénué de clichés, dans lequel, pourtant, il puisse y avoir une progression romanesque" (*Interventions* 73, 116). Language has lost its credibility, but the novel must, by way of dialectically turning language against its own agony, by way of its permissiveness of other discourses, and through narrative techniques, be capable of overcoming this. Houellebecq's novel aims at representing the totality of the state of emotions and existence at the end of the twenty-first century. Objectivity is attempted by the use of the omnipotent narrator, who later turns out to be a inhabitant of the future world. For the sake of narrative logic, one wonders at times how the narrator is capable of knowing these details of the lives: set in the past, narrated in past tense, the impression that we deal with a double fiction presented as historic tale to a future audience, is thorough. And it might be especially this perspective that recounts the present as past,

which helps to the attractiveness of the novel on a formal plain. The fate of the females is especially bad, but we as readers identify more with the two half-brothers, whose life is the opposite of what we wish for. Still, this negativity, portrayed in a laconic, depressive tone, and mingled with objective fragments of scientific and biological discourse, holds the attention, even if it is at times repulsive and repetitive, and the reader looks into the book like in a mirror of his and her own time, challenged to confirm or contradict the world-view presented.

Style and Modern Science

If I have earlier hinted to possible connections with French realism, at this point it is necessary to differentiate the different assumptions underlying *Les Particules élémentaires* and Zola's notion of naturalism. For naturalism, inspired by (human) science -- as we know, Zola's theory of the experimental novel rests on Claude Bernard's *Introduction à L'Étude de la Médecine expérimentale* -- there was no question of the possibility of character creation in novels. On the contrary, the credo of the naturalist is the almost scientific dissection of the character and its conditions. If for Zola, in 1893, experimental science served as an example for a new literary method, he could claim that "the metaphysical man is dead; our whole territory is transformed by the advent of the physiological man" (54.) The method of the experimenter, who observes phenomena objectively, and then puts them into certain conditions to gain insight into their workings and to prove or nullify neutrally his hypothesis, was to become the novelist's. Today, in Houellebecq's novel, a curious contradiction is detectable: science has, on the one hand, literally become not only methodological model, but structural principle and theme; it is also the solution to social problems that are rooted in human biology. The belief in social science has its roots in the nineteenth century: utopias (like the one of Fourier, who is mentioned in *Les Particules élémentaires*) consisted of rational solutions to social problems, and technology has been central to the imaginations of a better social organisation, at least until Wells. Fourier, producing absurdities of an interesting kind, also developed a rational system of "controlled" promiscuity, based on the assumed variety of temperaments, laid out in his *Le Nouveau monde amoureux*. Suffice it to say here that an interesting investigation would be the role of promiscuity and the prevalence of sexual pleasure in utopian imaginations by women.

On the other hand, the scientific solution has assumed a spiritual quality: Michel, the scientist and engineer of the "third metaphysical revolution," which really resembles more an evolution, a logical consequence of a biological insight, is inspired by the "Book of Kells" and his life is that of a saint, almost ascetic, his story a hagiography of a new species, he himself a saviour figure. Paradoxically, the development of human consciousness, the highest point of rationality leads to the extinction of humanity. To explain briefly: science and metaphysics no longer contradict each other, as was the case in Zola's polemics against metaphysical and idealist literature. This merging might also be due to developments in modern physics leading themselves to irregularities with meta-physical implications; the Copenhagen Interpretation, established in 1927, which impressed and influenced Houellebecq and found its subsequent expression in his protagonist Michel, tried to come to terms with the inconsistencies of Quantum mechanics whose principles were laid out by Max Born in Göttingen, but Niels Bohr and his Copenhagen Institute worked and interpreted them. Bohr's student Heisenberg had discovered, in the so-called *Unschärferelation* (uncertainty relation) that it is impossible to measure two interrelated factors of one particle, like location and impulse, or right and left spin: the very fact of measurement, that is, human interference, changes the data. This meant for modern physics that it had to abandon (or assimilate) the idea of an independent working of natural principles and also the possibility of an independent, objective epistemology of the scientist. Briefly put, Nietzsche's "Es gibt keine Tatsachen, nur Interpretationen" was also applicable to the science that relied most on the idea of factual certainties. Bohr suggested, and his is only one of many attempts at explanation, that the state vector, which stands for the breakdown of causality in quantum mechanics, only crushes in our imagination. This could very well mean: we create the world, even the natural world, according to our thoughts, and state relativism as principle for physics. Other inconsistencies, like the duality of wave

and particle, are, reductively speaking, resolved by calling into question the notion of reality as it existed for natural science up to that point, expressed in the principle *natura non facit saltus* by Leibniz in the seventeenth century. In quantum theory, the atom does exactly this: jump. The atom does not absorb or emit radiation constantly but in finite steps or quantum jumps.

Houellebecq borrowed the title and central metaphorical concept of his novel from modern physics: elementary particles, like quarks (whose name was borrowed from literature, namely from Joyce), are smaller units than the atom; in modern sociology, social fragmentation is also described as "atomisation," for instance. Consequently, what the metaphor suggests is an analogy of modern physics and human history, finally leading to the breakdown of social bonds and bigger units. Not only are there explicit passages in which the protagonist (Michel) proposes scientific notions of reality, memory, history, or free will (or all these as scientific problems), but also is the novel implicitly, structurally informed by Bohr's principle of complementarity. As Rita Schober suggests, Bohr's principle, unifying two mutually exclusive and complementary states of reality, informs the whole structural principle of the novel. Different states: dreams, experiences, thoughts, and diverse types of discourses (poems, scientific, historical, autobiographical, prose texts) are incorporated to produce a complete world of contradictions that are resolved only in the vision of the end of humanity which is its apotheosis. The half-brothers Bruno and Michel embody that principle: they live opposing lives (science and literature, ascetic and promiscuous, madness and fame), but nevertheless rely by way of an almost inexplicable relationship upon each other, without being able to express their dependency. Michel's molecular-biological ideas develop from the insight that sexuality is suffering and that reproductive evolution would not be the most efficient way of procreation. Bruno serves as an example in this regard. But things are more complicated: both suffer in different ways -- and also experience moments of happiness in the framework of their possibilities -- from the general social atmosphere, which, through the ideals of the '68s generation, has become inhumane. The metaphysical view of history with its different phases and dynamics -- in my view severely simplified in the novel -- reminds of the idea of "determination" that is basically inherent in both experimental science and Christian, Calvinist thought, while, of course, the assumed causes are different (natural laws, god's will).

Zola, in his essay on the experimental novel, emphasises the idea that, once a character is put into the experimental surrounding, his actions have to lead to a determinable conclusion just as a natural phenomenon is determined by physical and chemical factors. The factors in humans, he assures, are much more complex. In Houellebecq's thought, likewise, there is no free will, no surprise, no chance. Ultimately, the abolition of evolution by genetic engineering is only another step of a more conscious control of the factors that have determined humans all along and made them suffer. Mustapha Mond recognizes that the innovative character of science is socially destabilising, and stability (*stasis*) is the ultimate principle of this dystopia. Therefore, science, like art, has to be censored. Huxley, as Philip Tody argues, has taken many of his ideas concerning science in the World State and its role from Bertrand Russell's *The Scientific Outlook* (1931): the pivotal concept of Russell's dystopia, his "prophecy" of a scientific "World State," was the concept of power, which he conceived as the ability to manipulate nature on an unprecedentedly massive scale. The result of advances in scientific technique of his time was, he feared, its elevation into a political and social philosophy of instrumentality. What troubled Russell was the prospect of a wholesale extension of scientific technique, normally directed at the natural world, into the realm of social and political organization. What underlay such a development was the desire for mastery and control that seemed inseparable from science (see Baker 64). Reading Houellebecq, one feels reminded of Nietzsche's polemics against democracy and the decadent West, his heralding of the super-human. Nietzsche recognised the will to power in life, but he did not envisage the avant-garde role of science in shaping it. In fact, Nietzsche displays contempt against science and his notion of science seems to imply resentment while Houellebecq diagnoses what is imaginative truth in *Les Particules élémentaires* and suggests that science has no ideal, no positive will, but is just another form of the ascetic ideal: "die Wissenschaft

hat heute schlechterdings keinen Glauben an sich, geschweige denn ein Ideal über sich -- und wo sie überhaupt noch Leidenschaft, Liebe, Gluth, Leiden ist, da ist sie nicht der Gegensatz jenes asketischen Ideals, vielmehr dessen jüngste und vornehmste Form selber" (*Genealogie der Moral* 414f.). Both scientists in the novel, suffering from the conditions which they try to escape, sexual competition -- Desplechin, the aging homosexual man and the the sexually frustrated Michel, having hardly known the emotion of love -- react with their scientific undertakings. Their vision is reactionary, and so is the vision of the relationship of the sexes, implicitly expressed.

Sexuality

The roots for the degeneration of humanity *Les Particules élémentaires* are manifold, but human sexuality, a mislead eros freed from its reproductive function and subjected to sexual objects who are themselves subject to market regulation principles, is a major factor in it. On the other hand, the complete segregation of passion, love and reproduction are axioms of happiness in both utopian orders. But, whereas Huxley's world has overcome family bounds and passionate emotion by institutionalising compulsory promiscuity, and made sexual satisfaction available as commodity (despite the flaws of the system impersonated by the protagonists, Lenina and Bernard), in Houellebecq's novel savage sexual seduction, masked as "liberation" with the erasure of emotion and tenderness, has devastated the individual. Annabelle, youth friend of Michel and in love with him before their relationship disintegrates, commits suicide, like Christiane, lover of Bruno. Also, the mother and grandmothers die, basically all female characters in the novel die sooner or later. Love and death are profoundly associated with women, to an extent that Bruno doubts the male capability of love and Michel wonders what men exist for at all. On the other hand, for Bruno, but also for the indistinguishable voice of the omnipotent narrator, women are naturally better beings, and the male aspiration is to experience their love. This cliché-like connection between love, death and the female manifested throughout the novel, is a phenomenon, and deserves a more careful investigation than can be done here. Certainly, it recalls a dark Romantic topos: Poe stated in his "Philosophy of Composition" in 1850 that the most poetic topic was the death of a beautiful woman. Without further investigating psychological and socio-historical factors that led to this psycho-aesthetic conclusion, Wolfgang Matz claims that Annabelle's beauty, predestined through centuries of European love poetry and literature to face a tragic fate (as stated in the novel), only materialises as triviality.

Her life and death mark the turning point in European history of the mores, reaching from at least Petrarch's Laura (*Canzoniere*) up to Goethe's *Werther* and Flaubert's *Education sentimentale*. Beauty, not linked to an inner and spiritual meaning any more has become nothing but sexual prey, no social and metaphysical bounds restrain passion; therefore, passion and love have become obsolete (and obscene, one could add). While making use of Romantic topoi and ideas, Houellebecq seems to bewail their disappearance. The notion of love that hovers over the novel is expressed at many instants of which this can be considered exemplary with regard to agent and definition: "Human beings ... who have given their lives for others, out of love and devotion. In general, such human beings are generally women" (*Elementary Particles* 77.) Love, so intimately and ideologically linked only to the female sex, has different meanings for different times and people. The radical Feminist Shulamith Firestone analysed the social and literary metaphysics of love (as had done Simone de Beauvoir before): "The word love has by no means the same sense for both sexes, and this is one cause of the serious misunderstandings which divide them" (*Dialectic of Sex* 152) and commented on the Romantic glorification of female beauty and love. Basically, so she states, real love has never been possible, because it can only exist among equals, and historically women were socially and materially (thus emotionally) dependants. Romanticism, the Beauty Ideal, and the notion of love itself have been instruments of oppression. She analyses the concept of "love" from a social-psychological point of view and thus explains cultural manifestations of it: "the political uses of romanticism over the centuries became increasingly complex. Operating subtly or blatantly, on every cultural level, romanticism is now -- in this time of greatest threat to the male power role -- amplified by new

techniques of communication ... eroticism...stimulated to the limit ... has reached an epidemic level unequalled in history" (*Dialectic of Sex* 174). While for Firestone modern media manifested what she called a sex-class system, and the sexual "liberation" with its after effects meant further male exploitation, for Houellebecq both sexes suffer from the developments; however, he retains stereotypical roles and characteristics for women. For Firestone, the only way to end the perpetuating system of "sexploitation" of women on all levels was to gain control over reproduction. When her book was published, this seemed fantastic. Today, in-vitro fertilisation is possible. Reproduction can be technically completely separated from bodies, especially the female one. However, the engineers of the reproductive future (at least in Houellebecq's novel, but most likely in reality, too) are mostly men.

Annabelle, subject to insecurity induced by popular media and youth journals, thinks at one point that she understands Michel and his emotional cruelty. She had read the "Kreutzer Sonata," Tolstoy's moral parable, published in 1889. Annabelle must think in terms of the male's jealousy, and thus, her imagined understanding is ironically a misunderstanding. The narrator in the train of Tolstoy's tale killed his wife, with whom he had lead a marriage resembling an embittered fight. In the Afterword, Tolstoy explains his rejection of the bourgeois model of marriage on Christian terms. He, first, discarded the bourgeois social practice that men were enjoying debauchery whereas women had to stay innocent and were given into marriages that disappointed their expectations. He considered this custom leading to spiritually humiliating situations for both sexes, and materially and socially catastrophic ones for women. He opposed hypocrisy, infidelity, and pledged for abstinence, ideally also inside marriage. Love and carnal love to him meant mutually exclusive things. Houellebecq's protagonist Michel not only envisions a future without sexual differentiation (but sexual activity for pure pleasure!), but he is also "able, through somewhat risky interpretations of the postulates of quantum mechanics, to restore the conditions which make love possible" (*Elementary Particles* 251). Science and religion take on almost the same roles, and pose similar metaphysical problems: free will and love. While Michel has disclaimed the first, the latter has been restored on mathematical terms! Metaphysics indeed is not only not opposed to science any more, but it has become the consequence of scientific research. The modern revolution thus comes to its conclusion. Tolstoy also condemned the view that sexuality be a diversion, and prognosed the falling apart of family relations, vividly portrayed by Houellebecq. The latter grounds them in '68-ideals, personified by the protagonists' mother Janine. The idea, that it is as much the father's responsibility to care for the child is in no version considered. The third (reason) is that in our society, again as a consequence of the false significance given to carnal love, the birth given to children has lost its significance and, instead of being the goal and justification for relations between spouses, has become an obstacle to the pleasant continuation of amorous relations (see Tolstoy 165). Tolstoy pledged for the social recognition that carnal love was a state of bestiality, and not to be glorified as "poetic and elevated" by contemporary art (late Romanticism). He saw these trends in Russian society (of course in the upper classes, that were in close connection with Western Europe), and thus has to confront the paradox that the adherence to Christ and his teaching would lead to the extinction of humanity: "Chastity is neither rule nor injunction, but an ideal, or rather -- one of the conditions of this ideal. But the ideal is a true one only when its realisation is possible only in an idea, in thought, when it is presented as attainable only in the infinite.... Such was the ideal of Christ -- the establishment of the Kingdom of God on earth, an ideal, foretold by the prophets, about how the time will come when all people will be taught by God, will turn their swords into ploughshares...the whole meaning of human life consists in movement towards this ideal ... the absence of this Christian ideal would have annihilated the forward progress of humanity and therefore the possibility of life" (Tolstoy 168). The paradoxical structure of the idea encountered in Houellebecq's novel is similar: only the ideal of its own abolition kept humanity alive. Sexuality, biological necessity, is the root of evil on earth; bearing in mind that in the Hebrew Genesis the first human being was un-gendered, asexual, the scientific vision of *Les Particules élémentaires* and Judeo-Christian spirituality are in effect not far apart. Only the role of the agent has changed:

humanity itself fulfils its apotheosis: "the creation of the first being, the first member of the new intelligent species made by man 'in his own image,' took place on 27 March 2029" (*Elementary Particles* 263). History seems to terminate spirally: paradise is regained but self-created, technology mingled with spirituality leads to redemption.

Charlotte Perkins Gilman, writer and social activist of the late nineteenth century, also envisioned a chaste world. Her utopia *Herland* (published in 1915 as a series in her own magazine *The Forerunner*) consisted only of women. Three male travellers come across this country, and one of them later relates their experience. *Herland's* his-story is one of parthogenesis; after a terrible war, in which most of the population and all male members were killed, a woman (The Great Mother) suddenly developed the capability to auto-procreate. The land is characterised by peaceful and interested relationships among its citizens, a supreme knowledge and application of agricultural and technological methods, and a collective care for the children and state affairs. In fact, all of the vices of early capitalist economy have been omitted, and the women are the opposite of inactive, neurotic Victorian cliché-types. However, Gilman's society was more a moral than a religious one, and coincides with two points in Houellebecq's novel: that a female society would be superior, and a moral one eternally stable. Both base their conclusions on the assumption of an essentially different quality of female existence and behaviour. To conclude, it remains to state for us: whereas Houellebecq's novel is representatively much more explicit and elaborate with regard to the "main evil," promiscuity paired with materialism (the latter not yet a problem for the Christian critique of Tolstoy), Huxley almost shamefully deals with it, for example suggesting promiscuity as a social rite and religion in the "Orgy-Porgy-Scene" of the fifth chapter. Science has developed from being a pure instrument for technology to preserve social stability into a prophetic (Promethean) possibility of social salvation.

Note: The above paper is a version of Angela Cornelia Holzer, "From Huxley to Houellebecq: Style, Science, and Sexuality" at <<http://www.hichumanities.org/AHproceedings/Angela%20Cornelia%20Holzer.pdf>>.

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