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The Freeing Violation: A Quantum Approach to Planetary Healing in Margaret Atwood's Trilogy

Abstract: In Margaret Atwood's *MaddAddam* trilogy (2003-2013), rhetoric fulfils a thematic role and even exerts a sort of supremacy over the decisive role played by its scientific counterpart ('word person' vs. 'numbers person'). The balance of power is well represented by the specularity of the couple Adam/Crake. A mirroring of qualities – showing a continuum rather than a divide – is ubiquitous among the characters. Oxymorons, in particular, are like a *fil rouge* leading towards a crucial point of reversal of perspectives and values, a hidden level where antinomian couples reveal their secret union and complex interplay, such as science and religion, dystopia and utopia, outer appearances and the inner fabric of matter. References and suggestions coming from quantum theory can provide a unifying pattern and new keys to decipher the arabesque of fictional reality and possibly speculate about real developments. The magician "Slaight of Hand", another of Adam's doubles, obliquely evokes the greater illusionism at work in the phenomenal world – *Māyā*, as it was called in ancient India – and sets out to divert our attention from the crucial spots where meaningful action takes place. In Atwood's trilogy, private revenge and more general bio-ecological motivations favouring non-human forms of life converge so as to end the Anthropocene via a mass genocide and unscrupulous genetic practices. Yet, once the game changer is reached, all masterminds at work will lose their grip on the course of events, thus paving the way for the secret roots of existence to overturn old binomial patterns and establish new equilibriums.

Keywords: Utopia. Dystopia. Oxymoron. Quantum physics. Genetics. Extinction.

1. *The Dystopian/Utopian Continuum*

In the multi-faceted panorama of contemporary utopian/dystopian fiction, often set in a post-apocalyptic world, possible developments are explored in relation to a not-too-distant future and too shadowy elements in our civilisation which are further complicated by the advances of techno-sciences. The fictional form allows the simulation, in an imaginary world, of the quick ripening of those germs which, if left to their own logic, may cause great damage to various living forms, if not the complete destruction of life on our planet. Given its speculative potential and its propensity to highlight social exclusion, the dystopian genre may be approached as a sort of exorcist writing and as a way to go beyond recurring mental patterns, established trends and behavioural roles that are mainly taken for granted, if not actually codified in the DNA, as those aligned with biological essentialism might contend.¹ The latter is actually a treacherous field, especially when considered

¹ This is especially true for the rules and roles related to gender issues, implicitly assigning a subordinate and inferior status to women, who in the anthropocentric, patriarchal society are relegated to impersonating the reflected image of the 'other', so as to confirm the male's leading role. Genetic essentialism usually strengthens this cultural frame of mind.

in relation to gender themes, but it also conveys effective metaphors for the exploration of otherness and the hybridisation of species.

Approaches are multiple and ever-evolving. Tom Moylan and Raffaella Baccolini emphasise the contrastive quality of the utopian/dystopian genre provided by the adjective ‘critical’² placed before the noun that categorises it, which ties in with the postmodern trend towards self-reflection and with the concept of ‘critical mass’ required to trigger a reversal of perspectives. The latter is further expanded by Dunja Mohr³ by pointing at the process of dissolving the binary and oppositional logics typical of the anthropocentric approach. Margaret Atwood herself has contributed to the debate by creating the word *ustopia*, in which utopia and dystopia are combined to express the idea that “each contains a latent version of the other”.⁴ Atwood has also defined her own fiction as ‘speculative’, meaning that it shows possible and plausible outcomes of the current eco-social planetary situation. For her part, Donna Haraway speaks of ‘speculative fabulation’, explained as a way to weave together the creative aspects of imagination and the formalisms of scientific practice.⁵

What generally emerges is the awareness of a utopian/dystopian continuum consisting of a flux of interchanging positions, likely to show unexpected twists. Dystopian and utopian elements might thus be linked at the root, as two faces of the same reality, with the value judgement much depending on the observer’s position, as Atwood herself points out.⁶ In the *MaddAddam* trilogy we are thus confronted by multiple, unstable combinations of aspects, tending to engender contradictions and paradoxes in a kaleidoscopic manner. Bianca Del Villano points out how the textual palimpsest of the trilogy is rich in ‘implicatures’ on the level of the characters’ enunciations, which constantly heighten the degree of complexity.⁷ And indeed this feature, also extended to figural rendition, enhances the overall speculative potential of the whole text, conceived as a complex communication act.⁸ This makes it

² R. BACCOLINI and T. MOYLAN, “Introduction: Dystopia and Histories”, in EAD., ID. (eds), *Dark Horizons: Science Fiction and the Dystopian Imagination*, New York and London, Routledge, 2003, p. 2.

³ Dunja Mohr speaks of “feminist transgressive [rather than critical] utopian dystopias” as tending to dissolve established binary logics and embrace multiplicity and fluidity. This evolution of utopia meets the feminist search for alternative paths, able to transcend patriarchal and humanistic schemas at the root of the mistakenly universal discourse. See D. MOHR, “Transgressive Utopian Dystopias: The Postmodern Reappearance of Utopia in the Disguise of Dystopia”, *Zeitschrift für Anglistik und Amerikanistik. A Quarterly of Language, Literature and Culture*, 55 (1), 2007, p. 5.

⁴ M. ATWOOD, *In Other Worlds: SF and the Human Imagination*, London, Hachette Digital, Little, Brown Book Group, 2011, p. 66. The concept of the two sides of the coin, introduced here, is applied extensively in the trilogy.

⁵ D. HARAWAY, *SF: Speculative Fabulation and String Figures*, Ostfildern, Hatje Cantz, 2012, Ebook. Donna Haraway considers *sf* as the “material semiotic sign” for many forms of fiction, such as speculative fabulation, speculative feminism, science fiction, but also including the scientific discourse and string figures: the latter is seen as the locus of an encounter between theoretical and practical abilities. Speculative fabulation would thus be a praxis for creating models of *worlding* in the utopian ‘Terrapolis’, seen as “a niche space for a multispecies becoming-with”.

⁶ M. ATWOOD, *In Other Worlds: SF and the Human Imagination*, pp. 66-67.

⁷ B. DEL VILLANO, “Pragmatica e genere. La ustopia ecocritica di Margaret Atwood”, *Prospero. Rivista di letteratura e culture straniere*, 22, 2017, p. 199 ff., https://www.openstarts.units.it/bitstream/10077/17426/9/Prospero_Del_Villano.pdf (last accessed on 31 December 2020).

⁸ Paola Avella recommends applying extensively the tools of pragmatics to the interpretation of literary texts and to figurality, a domain where inferential ability is required for decoding symbols and metaphors. Inference is here often of a non-syllogistic kind, that is, with no guarantee regarding its indisputability. See P. AVELLA, “Il ruolo della pragmatica nell’interpretazione del testo letterario”, *ACME. Annali della Facoltà di Lettere e Filosofia dell’Università degli Studi di Milano*, 65 (1), gen.-apr. 2012, pp. 274-77.

increasingly difficult to separate what is advisable and ‘good’ from its opposite, the utopian goal from the dystopian scenario. Miles away from the classical utopia seen as a universal ‘blueprint of perfection’, all we can do is try and catch the glimpses of a desirable dream.

In Atwood’s trilogy, the desirable and the undesirable merge at a certain level and are prone to offer hybrid combinations that open the way to multiple planes of evaluation. Hybridisation is indeed a pervasive figure in terms of lexical (with many newly-formed lemmas), fictional and stylistic choices. In particular, the oxymoron may be the *fil rouge* capable of leading us through the texts’ serpentine path, signalling that we are approaching a crucial junction and that reversals are likely to occur, as we shall see through the textual analysis. At one point, one of the main grudges held by various dissidents against the technocratic society will lay the groundwork for different interpretative perspectives. The corporate groups that represent an extreme involution of capitalism are morally condemned for encroaching on living forms, manipulating at will their genomic configuration. However, this very practice ultimately offers the opportunity to overcome species barriers and establish startlingly new forms of dialogue and cooperation, not only going beyond the ecologically-committed point of view – mainly held by Jimmy’s mother and the God’s Gardeners – but somehow supplying the tools to bridge the divides inherent in the anthropocentric system.

In these dystopian narratives characterised by a utopian veining, the backdrop – both a pre- and a post-apocalyptic one – is enriched by a discourse about the interrelations between science and religion as factors capable of determining the paths of civilisation. Biotechnology (including genetics) and spiritual-subversive stirrings, spreading in a society that is close to its dramatic breaking point, are like forces at work in a chequered *tableau*. They are about to cause a systemic collapse followed by a new course for humanity, in a context where genetic adjustments have been made to rectify the destructive inclinations from a previous stage. The interfacing of these dynamic polarities, blended with gender themes, is here foregrounded through the dynamics between science – aiming at a mediatic and economic control – and the God’s Gardeners, who follow a sectarian ideology loaded with ecological and biblical echoes. Adam One, their leader, is the champion of the defence of natural life against lucrative genetic handlings and exploitation. These are two centres of power which, by secretly colluding, are to lead to the final crisis, alongside a course of events that reminds us of the recurrence of evolutionary/involutional phases throughout the civilisation process.

In short, in Atwood’s dystopian society two utopian nuclei emerge, whose leaders – Adam One and Glenn, *alias* Crake – create the ‘algorithms’ underlying their respective visions. The scientific one operates in line with the Compounds’ technocratic power and is constituted by some rebellious fringes led by Crake, the brilliant scientist responsible for ending and restarting civilisation via a newly-engineered humanoid species called the ‘Crakers’, after his nickname.⁹ Instead, the eco-religious one, started by Adam One in opposition to the main autocratic trend, is based in the “pleeblands”¹⁰ and is characterised by a strategy that is only allegedly naive. Both groups aim to save life on earth in the broadest sense by re-establishing an Edenic situation. In Adam’s and Glenn’s utopic projects, which

⁹ Crake is the name adopted by Glenn in the interactive online game called Extinctathon: “Adam named the living animals, MaddAddam names the dead ones” (M. ATWOOD, *Oryx and Crake*, London, Hachette Digital, Little, Brown Book Group, [2003] 2009, p. 92. All further references will be given in the text and associated with the acronym *OaC*).

¹⁰ The free, inhabited part of the world not enclosed or protected. Conversely, the Compounds are separated, privileged enclosures for higher members of the corporations and scientists.

are probably two faces of a single theoretical plan, one can find traces of the individual mind that first conceived the original blueprint (Adam's) and induced others to align to its goals, timings, and procedures.

In *MaddAddam*, the third novel, the intentions of the two leaders who sparked the crisis (Adam and Glenn) are no longer relevant. They both die after accomplishing their mission and, in the new interspecies equilibrium, their original visions are only partially fulfilled, owing to unexpected adjustments to their plan: as a matter of fact, most members of the new 'hyper-hybrid race' who is coming along spring from the mating between old humans and Crakers.¹¹ We might be tempted to consider Adam's position as aligned with a revised form of humanism, while Glenn would be firmly against anthropocentrism. In fact, Adam is committed to readjusting the role of humanity in a biblical framework, giving it a new ecological sense. In Bianca del Villano's words, he seeks to favour the 'biosphere' by using the discursive tools provided by the "semiosphere", thus conciliating the two dimensions on a theological and practical plane.¹² In one of his speeches, he celebrates man's naming of the other animals, an act at the basis of the humanistic view and to be considered as the foundation of verbal discourse and human predominance over nature. On the other hand, Glenn plans and manages to dethrone the human race from its privileged status, providing its successors with an in-built capacity to adjust to the environment, as wild species do, and ensuring that the so-called 'higher brain functions' would be deactivated: his action is definitely against the semiosphere, since he gives preference to wild nature as opposed to human culture. Given his goal, he might even be described as anti-utopian, for, ultimately, if someone cannot fulfil his own desire (apart from surviving) due to lack of creativity, what would the value of life be? Such is the blind alley his vision would lead into and – if he had not miscalculated (in fictional reality, of course) – the greatest contradiction of it.

As far as the religious sect is concerned, beyond our assessment of Adam's values, the overall tenor of the God's Gardeners' propositions should be considered. They might also be looked upon as an 'assemblage of contents' strategically aimed at furthering a plausible message while covering the hidden workings of its members – that is, the ruling class – as opponents to the power system. From this point of view, we might guess that there is a part of Adam's ploy that is not publicly proclaimed, which is pursued through methods that are not so harmless. Indeed, he verges on a manipulative style by exerting a covert influence so as to induce others to cooperate in his main design, as we will see more in detail.

¹¹ As Dunja Mohr acutely observes, the Crakers' voices, previously assembled in a choral *we*, become more differentiated as they learn to write and think as individuals. See D. MOHR, "Eco-Dystopia and Biotechnology: Margaret Atwood, *Oryx and Crake* (2003), *The Year of the Flood* (2009), and *MaddAddam* (2013)", in E. VOIGTS and A. BOLLER (eds), *Dystopia, Science Fiction, Post-Apocalypse. Classics – New Tendencies – Model Interpretations*, Trier, WVT, 2015, p. 296. See also pp. 283-89 for some literary biotechnological implications and the exploration of alternative relations between species which surpass old binarisms.

¹² B. DEL VILLANO, "An Ecocritical Retelling of the Bible: Genesis and Apocalypse in Margaret Atwood's *The Year of the Flood*", *Textus. English Studies in Italy*, 3, 2014, pp. 162-64. Del Villano makes reference to a divide between various ecocritical positions: there are those who maintain that the idea of nature is filtered and constructed by discourse – identifying it with the *semiosphere* – and those who remind us that the real nature, aka the *biosphere*, the domain which materially supports life on earth, is not touched by this post-structuralist reasoning and continues to suffer. A third current – possibly closer to Atwood's ideas – considers our existence as shaped by the semiosphere, as the ensemble of signs and semiotic systems, but also tries to direct discourse towards the necessities of the biosphere, accepting the interdependence between them.

2. *Adam versus Crake: Diverging Confluences*

Critical attention has generally focused on Crake's plan, since it is carried out to the extreme extent of a mass genocide along with the replacement of the human race by a new 'edited model', purged of the damaging inclinations to violence and to domination over other species. At the same time, at least in the scientist's intention, this new model is also bereft of spiritual, aesthetical, and creative faculties – which has proven faulty, as we know that the Crakers will express symbolic, artistic, and ritual-oriented tendencies. The Paradise dome, where the humanoids were genetically engineered by Crake, is significantly compared to a "blind eyeball" (*OaC*, p. 349) and dominates its enclosure, like an image hinting at science's disembodied vision, imposing its own version of the truth as gained from a detached perspective. Glenn's authoritative stance might then be assimilated to the "cyclopean, self-satiated eye of the master subject",¹³ thus occupying an outstanding position from which the non-isomorphic subjects and areas are necessarily excluded. This is then a deceptively clear vision, editing reality according to its own parameters while claiming to be scientifically objective. We might then say – borrowing Deleuze's terminology – that both utopian masters belong to the arborescent genealogy even while they are working to subvert anthropocentric schemas of thinking to establish a more "rhizomatic"¹⁴ style by promoting interspecies justice, overcoming the logic of profit and the exclusion of the weakest subjects.¹⁵ In fact, neither leader renounces authoritative principles or hierarchical organisation. It seems that their vision is somehow flawed.

Glenn is the one who actually puts an end to Anthropocene as the clear-headed and unemotional executioner of humanity – as Ernst Bloch notes, many utopian figures are endowed with a paranoid personality structure¹⁶ – but Adam One might be regarded as the real initiator of the process and the hidden mastermind who orchestrates it, even though, at one point, the process evolves by following powerful inner drives. Glenn's personality is offset by that of his pal, Jimmy, but his real double is Adam One, whose character acquires full roundedness in the last two novels. We know Glenn from Jimmy's point of view, in *Oryx and Crake*, and we have a portrait of Adam through his brother's account in *MaddAddam*. Zeb's personality is quite the reverse of Adam's, as Jimmy's might be seen in relation to Glenn's. These fictional couples might be considered as variations of an arche-

¹³ D. HARAWAY, "Situated Knowledges: The Science Question in Feminism and the Privileges of Partial Perspectives", *Feminist Studies*, 14 (1), 1988, p. 586.

¹⁴ The rhizomatic idea of thought is a figuration developed by Gilles Deleuze and Félix Guattari and works as an alternative to the arborescent model; while the latter is vertical and hierarchical and based on genealogies, the former expands horizontally in many directions, interconnecting multiple realities. In Atwood's trilogy there are slight hints at this conception. See G. DELEUZE and F. GUATTARI, "Rhizome", in IID., *Capitalisme et schizophrénie 2: Mille Plateaux*, Paris, Les Éditions de Minuit, 1980, pp. 1-15.

¹⁵ The traditional binomials, such as nature/culture, organic/anorganic [*sic*], human/animal are further destabilised by the recent post/trans-human trend (Haraway, Hayles, Moravec, and others). On the extension of the concept of social justice to the categories of gender, race, and species, see D. MOHR, "When Species Meet: Beyond Posthuman Boundaries and Interspeciesism – Social Justice and Canadian Speculative Fiction", *Zeitschrift für Kanada-Studien*, 37, 2017, pp. 44-49.

¹⁶ E. BLOCH, *The Principle of Hope*, Engl. trans. N. PLAICE, S. PLAICE, and P. KNIGHT, Oxford, Blackwell, (1954) 1986, p. 144. It has not gone unnoticed that Crake's studies department was called "Asperger's U" ("for the high percentage of brilliant weirdos", *OaC*, p. 227), thus introducing the suspicion of mild autistic and compulsive disorders in the young scientist's personality.

typal model derived from hypotexts such as Cervantes's *Don Quixote* and Conrad's *Heart of Darkness*, made up of antithetical personalities, each acting in conformity with certain recognisable patterns of behaviour.¹⁷

However, there are other aspects here at work, making the picture more complex. Namely, Glenn is a 'numbers person', while his companion is a 'word person'. Zeb is a man of action, a warrior skilled in informatics, while Adam is the spiritual leader, skilled in handling language and rhetorical strategies. By reading closely, we can detect in this foursome a sort of chiasm figure: in the first couple, it is the 'numbers person' who has the leading role, while in the other one, the boss is the 'word person'. But, considering Adam and Glenn together, we might say that the word-expert, Adam One, paves the way for Glenn, subtly inducing the brilliant scientist to implement the realisation of his own vision by providing the genetic expertise required to give lasting shape to a new order. Actually, as Bianca Del Villano points out,¹⁸ Glenn also expresses, from time to time, a vision based on the awareness of the linguistic level, as when he dismisses the idea of God as an illusion provided by grammatical structures, while Adam gives Him a theoretical status founded on the concept of 'no-thingness' ("God is indeed the No-thing, the No-thingness").¹⁹ Adam, at least at an overt level, tries to reform mythology and culture from the inside by updating biblical teachings, while Crake's answers to the God-quest consist in simplifying and flattening language by acting directly at the genetic level, besides erasing human culture with a view to saving the planet. But their theoretical positions regarding ultimate realities – being in a complementary relation to one another, i.e., embracing absence vs. discarding it – are inextricably connected, as the narrative outcomes show.

It has already been noticed that there are unexpected correspondences between the God's Gardeners and the Crakers. I would say that the new humanoids might seem the *genomic fixation* of certain behavioural and ideological traits of the members of Adam's sect. The blueprint common to both groups comes to the fore by comparing the cultural self-imposed ways of one group with the biologically dictated ones of the other. Let us look, for instance, at their way of dressing. The monastic style of the God's Gardeners and the guileless nudity of the Crakers amount to the same result, that is, nullifying eroticism. Glenn has indeed contrived to reduce women's sexuality to a seasonal oestrogenic flaring up (once every three years!) aimed at procreation, in a communal group experience to be consumed in a foursome with joyful exuberance.²⁰ In this polyandric system, the woman chooses among the males who offer flowers to woo her, but she cannot decline the offer and simply stay alone, escaping the duty of procreation, and this is quite an ambiguous way of establishing

¹⁷ See F. CIOMPI, *Conrad. Nichilismo e alterità*, Pisa, ETS, 2012, pp. 26-27. Zeb and Jimmy are situated at the more practical end of the spectrum and are committed to accomplishing the projects devised by Adam and Glenn, who are elusive and extraordinarily gifted. As with the Marlow/Kurtz couple, in *Heart of Darkness*, Jimmy and Zeb are the narrators of the others' story and feel in a way obliged to preserve their memory, even if both Jimmy and Zeb, at a certain point, will feel deceived by their companions and will try to gain autonomy, thus relatively freeing themselves from the others' influence.

¹⁸ B. DEL VILLANO, "An Ecocritical Retelling of the Bible: Genesis and Apocalypse in Margaret Atwood's *The Year of the Flood*", pp. 158-59.

¹⁹ M. ATWOOD, *The Year of the Flood*, London, Hachette Digital, Little, Brown Book, (2009) 2010, p. 61. All further references will be given in the text and associated with the acronym *TYotF*.

²⁰ God's Gardeners' blue sack-like clothes are humorously countered by the blue coloration of the Crakers' bellies and genitals during the season of their mating.

matriarchy. Apparently, Glenn was not too keen on women's liberation theory!²¹

Things are not so neat, however, since we often sense a sort of ambivalence in which pairs of opposites coexist: the God's Gardeners are unwilling to bother about aesthetic and 'frivolous' cares, thus challenging the consumeristic trend of society which continually advertises beauty treatments as the equivalents of immortality. The same is obviously true for the naked Crakers, who only act under the impulse of the procreative drive. Nevertheless, Glenn has somehow managed to make them stunningly beautiful, actually resembling fashion models.

Another clue to the complex interrelation between the two groups might be detected in their approach to the 'violet biolet' matters. From Ren's account we know that only light curtains protected the privacy of the God's Gardeners' rooms, and that was somewhat awkward when it came to the lavatory situation. They claimed that "digestion was holy and there was nothing funny or terrible about the smells and noises that were part of the end product of the nutritional process" (*TYotF*, p. 76), which does fit well with their insouciance regarding elegance and refinement. In *Oryx and Crake* Glenn explains to a puzzled Jimmy how he had to adapt the humanoids' digestive system, endowing them with a special organ (*caecum*), inspired by the Leporidae (hares and rabbits) in order to allow multiple reingestion of the same food (caecotrophs) and break down cellulose. Jimmy objects that it ultimately amounts to ingesting one's own faeces ("what it boiled down to was eating your own shit", *OaC*, p. 187). Glenn replies that it is functional to optimise nutrition and "any objections to the process were purely *aesthetic*" (*OaC*, p. 188, emphasis added), which reminds us of the God's Gardeners' pragmatic, carefree approach to digestion matters. Of course, we might detect here a sort of ironic retribution on Crake's part, since one of humanity's latest habits was a generalised cannibalism, with a further ominous nuance linked to the abusive male attitude towards women, as in Blanco's case. In light of these details, as well as from the long-term plan to restore an Edenic condition on earth – one fully integrated into the environment and unmediated by human technology – we might posit a sort of filiation between the two systems, where Glenn's would be the derived one, providing the *essentialised* translation of Adam's master plan. In simple words, as the God's Gardeners' choice of vegetarianism is deeply inbuilt in the Crakers' digestive apparatus, the same would be true for many of the latter's behaviours, mirroring the God's Gardeners' learned ones. In keeping with Bianca Del Villano's reasoning,²² I would say that while Adam maintains a theoretical approach that goes deeper towards an inner core of truth, and which he defines in negative and immaterial terms, Glenn chooses to operate on a tangible, material plane, refusing to postulate what is not measurable or consistent with his scientific view. It seems to me that the two positions are mirror-like and inverted, the first one focusing on the invisible, and the second focusing on materiality, with their results having many common traits, as a detailed comparison can show. In both cases, God is seen to apply to an unattainable aspect of reality, and can be postulated (as a *no-thingness*) or denied, according to the disposition of the subject.

As hinted above, Crake's handling of the situation is somewhat authoritative, as reflected by many statements and drastic actions on his part. While explaining his Paradise

²¹ The Crakers' mating ritual borders on rape in the eyes of the non-Craker women (especially Amanda), for the Craker men will not take 'no' for an answer; of course, the whole procedure is aimed at procreation.

²² B. DEL VILLANO, "An Ecocritical Retelling of the Bible: Genesis and Apocalypse in Margaret Atwood's *The Year of the Flood*", pp. 151-70.

project, he speaks of the genetic changes in a rather ambiguous manner when he advertises the features of the humanoid prototypes (also defined as “floor models”, *OaC*, p. 355) as likely to please world leaders, for they are engineered to be docile, unaggressive and, of course, good-looking. These are actually much valued qualities in the dystopian society he is going to erase. His comment might be ironical, but the implication is that the “models” would be appreciated by a hypothetical, would-be world dictator. Given also their limited intellectual potential, we have an uncomfortable feeling about a double-edged strategy, which could evolve through unforeseen directions.

In the same unilateral manner, he resolves to excise the neuronal configurations responsible for religious, creative, and artistic trends, deliberately effecting a sort of genetic lobotomisation in the new race, up to his clamorous statement about eliminating the very idea of God: “the G-spot in the brain, *God is a cluster of neurons*” (*OaC*, p.186, emphasis in original). The Crakers are also not supposed to write or develop speculative thought, and the God’s Gardeners proceed (once again) on a parallel plane, since they are prohibited from leaving any written records, giving the impression they were about to resume oral traditions.²³ Glenn did not manage to eradicate the ability to sing, in that the Crakers sing all the time, this being another feature in common with the God’s Gardeners. Moreover, the vocal sounds emitted by them have a crystal-like, extra-human quality, resembling – one might hazard – the music from the spheres, and thus symbolising the very irreducible spiritual dimension denied by Crake. I think that their ‘uncanny’ singing is the audible sign of the impossibility of erasing the higher human functions, probably rooted in a sort of *otherness*. This might be the paradoxical dimension that Adam calls ‘no-thingness’, which would justify the recourse to the word ‘uncanny’,²⁴ leading us towards the cognitive model derived from quantum physics, as I am going to show.²⁵

We might also object that Adam would encourage his followers to stay committed to devotional practices, whereas Glenn would try – as with the singing – to radically prevent his Crakers from doing that, without succeeding, as they develop some sort of ritual.²⁶ As noticed by Jimmy, they also show a tendency towards “conversing with the *invisible*” (*OaC*,

²³ The transition from an oral culture to a written one, with reference to 5th-century classical Greece, is considered as a milestone for the developing of speculative thinking and the leaving behind of the mythological frame of mind. This was mainly because the written word favoured the objectification of the thinking process, linking it to an intellectual dimension rather than to a given speaker. See E.A. HAVELOCK, “La composizione orale del dramma greco”, in C. MOLINARI (a cura di), *Il teatro greco nell’età di Pericle*, Bologna, Il Mulino, 1994, pp. 92-93.

²⁴ When, in fiction, a deep and elusive level of being is increasingly approached and alluded to in various terms (oblivion, solitude, the heart of darkness, “the Open that is at the foundation of things”, the unified field), some ‘uncanny’ manifestations might present themselves, as I have suggested in a close reading of *Heart of Darkness* and other texts, where phenomena of the return of the repressed are also involved. Then again, the French philosopher Lacoue-Labarthe connects the Conradian ‘horror’ – related to Kurtz’s ‘hollow core’ – to the *rien d’étant*, the nothingness of being, a concept derived from Heidegger. See P. LACOUÉ-LABARTHE, “The Horror of the West”, in N. LAWTOO (ed.), *Conrad’s Heart of Darkness and Contemporary Thought: Revisiting the Horror with Lacoue-Labarthe*, London, Bloomsbury, 2012, pp. 116-17; A. ROCCHI, *L’incontro con la wilderness. Macrofiguralità e incroci intertestuali da Conrad a Malouf e Patchett*, Pisa, ETS, 2017, pp. 85-86, 147-48, 167-68. See also note 49.

²⁵ We might postulate that the human’s neural cortex and nervous system are specialised in capturing this unsubstantial alterity, the impersonal intelligence diffused throughout creation.

²⁶ They do that spontaneously, but they are not the only ones among the hybrid new species: the pigeons (*the pig ones*) mourn their dead with some nascent burial ceremonies, and, as Toby fleetingly notes, the elephants – the old species, not an engineered one – did that too. Noticeably, barriers have always been porous.

p. 186) – a dimension that Crake was adamant about ignoring – and therefore an attitude of devotion.²⁷ Of course, Adam wants the God’s Gardeners to be ecological, respectful of animals, averse to consumerism and commodification, with celebrations helping to strengthen their beliefs, while Crake’s humanoids are already entrenched in the ecological line by virtue of their genetic constitution. Besides, one might have some reason to suspect Adam of adopting a strategy aimed at emotionally involving the simpler members of the sect in order to make them veer towards the desired course of action, whereas the Adams and the Eves – the ruling *élite* in the cult – know better than that. When Adam suggests that Toby accept the role of Eve Six, she hesitates and cautiously admits her basic lack of belief in what he is preaching. He appreciates her honesty and affirms that, in their form of ‘religion’, *action precedes faith*. So, what is required of her is only to act *as if* she believed. This amounts to admitting that his doctrine is, in a way, a *construct*, and that it requires trust, besides ironically alluding to Pascal’s precept *Priez et vous croirez*, adding the hidden implication of *gambling* (as the precept resembles a *bet*) to the already precarious certitudes he is offering to her.²⁸

Moreover, Adam says that all religions are only a shadow of God, human intellect allowing only a dim representation of the truth. This might signal his resorting to familiar tactics to obtain obedience (like “the reason is bigger than you are”, “you don’t need to comprehend the entire plan”, and so on). But it also recalls what quantum physicists tell us: reality is not what it looks like – so that the dynamics of subatomic particles’ behaviour are similar to the visions of saints, or to drug-induced ones. We have an example of this idea through Toby’s eyes, when she ingests ritual drugs (at least twice) to induce the deeper understanding she needs at some crucial point. The first time she resorts to drugs, it is to be enlightened about whether or not to become Eve Six. She then sees a tomato plant glowing, with its fruits beating like hearts and the crickets producing strange sounds: “*quarkit, quarkit, ibbit ibbit, arkit arkit*” (*TYotF*, p. 204, emphasis added), which might be a discreet hint at the realm of subatomic particles. When firstly discovered, the quark was thought to be the most essential, primary constituent of matter, revealing the unstable reality of many others, which were said to be even more unsubstantial and unpredictable. The other two terms might refer to information technology for interactive communications and ‘augmented reality’, fleetingly suggesting that our so-called conventional reality might be holographic, with reference to the broadening of the spectrum obtained by our sensory receptors as the necessary condition to enter its most subtle, hidden aspects.²⁹

The vision Toby gains is also meaningful and epiphanic for the reader, even if it seemed rather opaque to her at the time. Her tell-tale image was an animal with “gentle green eyes and canine teeth, and curly [golden] wool instead of fur” (*ibidem*), in which her mentors (Adam and Pilar) conveniently recognise a lion, choosing to see it as a positive sign of strength, in view of her new role. Actually, we are in a position to infer that the image corresponds to a “liobam”, a genetic splice obtained from “lion” and “lamb”, ordered by

²⁷ The women perform a sort of invocation to Oryx, raised to the rank of a divine figure.

²⁸ Actually, as we are going to see, the idea of gambling also recurs in Crake’s vision, as the name ‘Para-dice’, chosen for his project, ambiguously suggests.

²⁹ “Ibbit” and “arkit” might be decodified as referring to the Integrated Broadcast Broadband systems (Ibb) – employed to improve interactive communications – and to the various applications (Arkit) simulating interactive augmented reality and inducing an enhanced virtual reality. Besides, “bit” might stand for “binary digit”, the smallest unit of stored computer information, carrying either value 0 or 1.

the Lion Isaiahists – another “fringe cult” (*TYotF*, p. 47) – to represent and also to induce, to “force” (*TYotF*, p. 112) the fulfilment of the prophecy about the two animals living in peace on earth. At the time of her vision, Toby has never seen a liobam in real life and she does not identify it.³⁰ But we do, and since she basically needed to clarify her religious doubts, we might suppose that the encoded answer was that theology is *indeed* a construct, made out of ideas and verbal precepts functional to some purpose, thus sharing the hybrid nature of splices and apt to guide individuals not fully able to cope with truth by their own means. In *MaddAddam*, Toby entertains the Crakers with stories that veil the realities they are not prepared to absorb, repeating thus the ancient practice of speaking and preaching in a language appropriate to the auditorium, as in fables and in certain holy books, and as Adam had done, too. So, since the liobam is doubly dangerous, because the ferocity of the beast is disguised by its gentle appearance, the visionary image might be understood as an implied assessment of the practice to *force* the advent of any utopian condition on earth, which is what is indeed attempted by Crake – a warning that, significantly, not even Adam had been able, or willing, to grasp. The liobam contains the figure of the oxymoron, which I think is pivotal in the trilogy and might lead us to a core meaning, a central *beeping spot*, capable of disclosing unexpected perspectives.

3. *The Leading Role of Rhetoric*

So, neither of the two leaders, Adam or Crake, is completely ‘pure’, as they retain a certain degree of affinity, in the form of shared mind-patterns, with the power groups they originate from. For instance, Adam One is skilled at using inducement strategies as was his father, the chief of a squalid sect called PetrOleum Church, which represents the apotheosis of corruption, as hinted at in the satirical touch associating the multinational oil industry with Petrus’s church.

Speaking about his brother, Zeb says: “he was just like the Rev, really, *only inside out, like a sock*: neither one of them gave a shit about anyone else. It was always their way or zero”.³¹ He also describes their father as a criminal, a “cheerleader for souls” (*M*, p. 71) and their boss at the same time. The Rev created his own cult to “thank the Almighty for blessing the world with fumes and toxins” (*M*, p. 136), which is in a way analogous to what Adam did with the God’s Gardeners, except that the Rev’s ‘religion’ was aimed at lucrative, unethical goals, professedly in favour of pollution. The father told people what they wanted to hear, ran media outlets, befriended politicians and the Corps members: a kind of behaviour which annoyingly recalls his son’s policies, only reversed, and directed towards criminal ends rather than ecological ideals. The Rev looked “pious as hell”, another oxymoronic expression which ties in with images like “the flip sides off the same coin” (*ibidem*) and of the sock turned inside out, and also with the interlacing utopian/dystopian aspects, well represented by the complementarity of Adam and his father, amalgamating noble and ignoble, desirable and undesirable aspects. The Rev, besides creating a fake, corrupt religion, is also an abusive father, an uxoricide and a sexual pervert, whose

³⁰ Due to the time-shifting narration, we know that she would see real liobams only after the great plague.

³¹ M. ATWOOD, *MaddAddam*, London, Hachette Digital, Little, Brown Book Group, 2013, p. 407, emphasis added. All further references will be given in the text and associated with the acronym *M*.

degree of degeneracy matches that of the evil Painballers, who epitomise the quintessence of violence and oppression. The latter's already evil nature has exponentially increased through a sort of institutional survival training, created to give a chance to the most heinous criminals, as an alternative to capital punishment. It functions as a sort of extreme "knitting machine", in Conradian terms.³² The men who succeed in escaping from the arena are mentally rewired, so that their higher cognitive and spiritual functions (in the unlikely case there were some left, at the start of the procedure) are definitively dwarfed. They are to act only through the reptilian, automatic brain area, which, when predominating, prevents empathy and generates addiction to aggressivity and the craving for power.

Indeed, we have here another puzzling chain of associations which might link the Painballers' gangland to the innocent Crakers, apart from the latter's extraneousness to aggressivity. Both groups are in fact re/programmed to function instinctively and without intellectual mediation: the Edenic humanoids, who are devoid of any knowledge of evil, and the representatives of the *ultra-fallen* old humanity. At the beginning of *MaddAddam*, the Crakers are indeed the ones who, in an untimely manner, free the two imprisoned Painballers – the torturers of women – in an unreflecting and unpremeditated way. In so doing, they bring about a new phase of chaos, which the alliance of Toby, Ren and Amanda had temporarily succeeded in keeping at bay by capturing the Painballers. This anomalous, limited convergence of the peaceful humanoids and the worst champions of fallen humanity, a distillation of evil, might be grounded in the region of brain's physiology that pertains to basic autonomic functions and survival capacities. At the end of *MaddAddam*, the explicit reference to the *medulla oblongata* – respectively, the names given to the human-Crakers hybrid twins, a female and a male, born to Swift Fox, a scientist and ex MaddAddamite³³ – calls to mind the neuronal ganglia located in the brain stem. As a consequence, the Crakers' unreflecting action might just *stem* from this ancient part of the nervous system, which, depending on occurrences, can ignite a vital drive or a deadly one (Painballers), that is, the urge to live or its opposite (the destruction of other forms of life or our own). Here, one might single out a physiological root for the Freudian theory relating to the pleasure principle and death drive. We can then see how meanings are refracted by endless mirroring effects, entangling characters and groups in a multi-faceted prismatic conceptual system that innovatively links linguistic constructions and fictional realities.

Having inherited the strategic abilities and persuasive talents of his father, Adam uses them for a noble cause, but we can see the shadow of the Rev in his iron hand in a velvet glove, and in the rhetorical skills he uses to convey his eco-eschatological message. In my opinion, he adopts a sort of double register that lets us guess the utilitarian nuances and pragmatic undercurrents in his doctrine. He establishes an oligarchic *élite* conforming to different standards, keeping computers as well as governing "as ruthlessly as medieval

³² In a letter to Cunninghame Graham (20 December 1897), Joseph Conrad referred to a perverse automatic process able to "knit us in and out" without any chance to undo it. Conrad evoked thus the socio-ideological complex of strategies aimed at maintaining a certain political order by training individuals to act in favour of imperialism. This process generates behavioural automatisms. While analysing the reasons for the carnage in Rwanda during the 1990s, François Warin spoke in terms of a "genocidal machine", apparently misquoting Conrad's expression. See F. WARIN, "Philippe's Lessons of Darkness", in N. LAWTOO (ed.), *Conrad's Heart of Darkness and Contemporary Thought: Revisiting the Horror with Lacoue-Labarthe*, p. 136.

³³ A group of scientists acting inside the sect, who eventually abandon Adam's cult to follow Zeb's leadership. Crake forced most of them to collaborate with him in the Paradise project; only Zeb escaped the coercion.

monks" (*TYotF*, p. 225), without being required to fully believe: in a word, they tend to be 'more equal' than others (in Orwell's famous formulation).

For his part, Crake, the scientific mind allied with and aligned – as an outsider – to the God's Gardeners, does not have any scruples in adopting intimidating methods while putting into action his plan for regenerating humanity. Such methods are actually analogous to those used by the CorpSeCorps, the private police at the service of the Compounds' *élite*. The MaddAddamites who tried to escape forced collaboration in his genetic project "fell off pleebland overpass" (*OaC*, p. 353). This expression, which alludes to the MaddAddamites' elimination, also applies to Glenn's father's death, a crucial event the son will dedicate his life to revenging, as Shuli Barzilai³⁴ points out through a comparative analysis with Shakespeare's *Hamlet*. Adam and Crake retain the ruthless, hierarchical traits of the dystopian regime which resurface even in the post-apocalyptic world, along with a new posthuman order. This is possibly signified by the thin smoke that, in the end, announces the departure of Zeb from the group of the survivors plus Crakers. The residual evil is smouldering and emits alarming signals.

In their developing mythology, the Crakers are told that their creator had wanted to eliminate the *chaos* from the world for their benefit. Apparently, the intended 'thorough cleansing' cannot be absolute, as in the ancient Indian civilisation, where the universal order was represented by the concept of *rita*, according to which even an ideal situation must contain a small amount of disorder, which is functional to the overall equilibrium, meaning that we cannot have absolute perfection without a trace of chaos. On the other hand, even if Glenn claims to be scientifically neutral, his alleged objectivity is filled with dialectical and rhetorical elements (as hinted above), detected by Jimmy in his friend's reasoning about the concept of im/mortality, which the scientist equates with the absence of the foreknowledge of death ("Sounds like Applied Rhetoric 101," said Jimmy. 'What?' 'Never mind Martha Graham [rhetoric school] stuff", *OaC*, p. 356). Crake the scientist is apparently trying to become familiar with the rhetorical tools, a fact that links him to the top rhetorician, Adam – as in their assessment of the notion of God. However, since Adam is more skilled, Glenn, while tentatively moving a few steps into the other's domain, lays himself open to his influence or even manipulations, as we shall see.

Besides his aptitude for convincing and recruiting devotees, Adam displays an even darker side, which the reader can infer at some crucial junctures in the narrative. At one point, Adam needs to eliminate his father in order to continue on his way, but does not commit parricide himself. He creates the perfect situation to induce Zeb to execute him. His brother operates in the sect as Adam's secular arm, doing the dirty work that cannot be avoided; that is why his non-orthodox behaviour is tolerated in the sect. We know from Zeb's account to Toby that he was sent on duty to the Scales and Tails sex club. Through Pilar (a senior Eve coming from the Compounds' top scientific minds), Zeb had previously received a 'bishop' forwarded by Adam. That chess piece concealed three pills containing lethal bioforms, the prototypes of the Blisspluss pill that Crake would later spread all over the globe. Adam himself recommended Zeb keep those pills at hand at the Club, where the Rev would arrive in due course. As the 'bishop' is a religious chief (besides being a chess piece), the cryptic message metonymically means that the poison is intended for the Rev,

³⁴ S. BARZILAI, "Tell My Story': Remembrance and Revenge in Atwood's *Oryx and Crake* and Shakespeare's *Hamlet*", *Critique: Studies in Contemporary Fiction*, 50 (1), 2008, pp. 87-110.

his so-called religious authority identifying him. Therefore, the vector ('bishop') of the pills implies that the poison would have to be put inside the displaced real objective, i.e., the Rev's body (literally, it should be ingested by him). This is a meaningful example of how Adam uses rhetoric to create powerful phrases or images, thus conveying his will to instigate adepts to perform the required actions.

Pilar, at the time, was also acting as a friend to the young Glenn, and while delivering the bishop to Zeb she informed him that it was with the same poison that Glenn's father had just been murdered and that, given his swiftness of mind, the boy would not take long to realise it and act accordingly. It might be no coincidence that Glenn himself avenged his father's death on the greatest imaginable scale, setting into motion a mass genocide and, at the same time, giving concrete form to Adam's prophecy about the end of humanity. Both Adam and Glenn were similarly motivated to avenge a parent who had been murdered with the participation or connivance of the other, but the one who first acted accordingly, and who contrived to provide the younger one with the inspiration and the tools to do so, was Adam.

After the noxious bioforms, contained in the secretive pills, had reduced the Rev to pink froth, the remaining ones were returned to Pilar, who would undertake to analyse them: why did she not proceed to do it in the first place? Why introducing this detour through Zeb and the Scales and Tails sex club if not to create the opportunity to eliminate the noxious parent? Afterwards, Pilar left the HealthWyzer Compound to join the God's Gardeners and be Eve Six for a while. After her death, the pills are sent to Glenn with a letter from his deceased friend: it was her last wish, and Adam is shown as *passively* approving. But we know how skilled he was at making others conform to his unspoken wishes. In this context we learn who Eve One was. Her name is Katrina WooWoo, a mysterious woman Adam was in love with, a dark Madonna-like figure who ran Scales and Tails, but who, at the time Zeb had first met her, danced on a trapeze with a python draped around her neck. In that previous period, she had also acted as a *Miss Direction* for a magician: that was what Slight of Hand – an artist with whom Zeb worked, too – called the female assistants who helped him to *divert* the audience's attention at crucial moments. So, Adam had a passion for the elusive, lynx-eyed girl, the same *Miss Direction* his own brother had previously set eyes upon. This is a telling fictional detail highlighting Adam's inclination to act covertly, *misguiding* both his adversaries' and his converts' judgement through his active proselytism. Moreover, the peculiar association of this "scaly, feathery" (*M*, p. 211) kind of woman, endowed with great seductive power, with the idealistic and apparently naïve Adam might be connected here with his talent in the art of rhetoric, traditionally conceived to make sharp weapons out of words, also given his willingness to use it to entice and persuade people under the aegis of the legendary Sirens, a mythological foundation for that classical art. The effective word – trained to be an apt, double-edged instrument – might eventually convey a veritable sort of knowledge, while being ambiguous, engaging, and even misleading.³⁵ At the same time, a near connection with Slight of Hand – possibly

³⁵ Laura Pepe identifies in the myth of the Sirens, engaged in a singing contest against the Muses (their aunts), the imaginative pattern at the foundation of rhetoric, to which they would provide the captivating, persuading, and sly side, oriented to win at all costs, whereas the Muses – who prevail against them – represent the noble aspects of the arts. See L. PEPE, *La voce delle Sirene. I Greci e l'arte della persuasione*, Bari e Roma, Editori Laterza, 2020, Ebook, pp. 9-15. Besides, I would point out that the very idea of courtship, associated with Katrina – WooWoo, as Zeb calls her, her real name being Wu – and applied to an enticing usage of words, might also suggest intriguing conjectures about Atwood's views on the nature of storytelling.

another of Adam's facets – is established, placing Adam in yet another current of thought; the illusionist Slight of Hand obliquely provides an apt metaphor for the great illusionism at work in the phenomenal world – the divine play originating reality, called *Māyā* in the ancient Indian civilisation and, in a later phase, acquiring the connotation of a mirage.³⁶ The love triangle might then be regarded as symmetrical to the one involving Oryx, Jimmy, and Crake – Oryx being loved by both – also given the latter's propensity for leading his friend astray in order to obtain his collaboration in the Paradise Project, and possibly even induce Jimmy to end Oryx's life and his own – as Jimmy would realise afterwards.

At this point we might conclude that a certain amount of fictional details points to a hidden circulation of ideas and crucial intelligence between the forces at work. Such details are either explicit, as Pilar's letter – even if its real content has to be intuited –, or exerting a less direct influence, as the encoded message sent to Zeb via the bishop. For instance, we know – through Ren's account in *The Year of the Flood* – that at one point she and Glenn had a fleeting amicable relation as teenagers, after she had returned with her mother to the privileged world of the Compounds. They enjoy discussing the God's Gardeners' ideas together; we have here a rather puzzled Glenn who tentatively enquires about the sect's representations of the Waterless Flood: did the God's Gardeners really believe that the deadly event would occur soon? The concept derives from God's promise in the Bible to never again resort to waterfloods in order to exterminate humanity, as a pact established with the survivors after the waters had retired from the face of the earth. But the oxymoronic expression is insistently used by the God's Gardeners at the pre-apocalyptic time to warn about the imminence of disaster. They are indeed preparing for that event, training themselves to survive in the bush, stockpiling hidden food and so on. The emphatic repetition of their chosen formula creates an emotional terrain in their listeners. And Glenn, being informed about his father's murder, is in a good position to pick it up. More so after receiving the same pills that had been cause for the crime³⁷ – provided by Pilar with Adam's consent. He is indeed the perfect recipient to fully acknowledging the implied message, and, like Zeb, he might also absolve the function of a 'vector' for the chain of action to be continued. But the initiator of the chain was Adam One.

So, besides the more or less overt moves to obtain Crake's participation in a large-scale project, I think there are effects rooted in the power of language structures and rhetorical figures at large, of which the oxymoron is probably the most powerful in this context. As we know, according to Freud, the contents of the unconscious are naturally represented by condensation and displacement. Jacques Lacan has traced this basic functioning back to the language area, pointing at figures of speech such as metaphor and metonymy, and aligning himself with the positions of linguistic structuralism. But sensory perceptions (auditory, tactile, and visual) also contribute to the formation of tropes, so that verbal language is not exclusively involved in the process of conveying meaning, as happens with the *liobam* in Toby's vision, where the trope consists of a wordless image.

³⁶ M. ANGOT, *L'Inde classique*, Paris, Les Belles Lettres, 2001, p. 204.

³⁷ Glenn's father had discovered a criminal plan concerning the use of those bioforms (hidden into health supplements to be subsequently spread around) for lucrative aims and dissented from it. Margaret Atwood has stressed the fact that, in her "speculative fiction", she deals with potentialities inherent in our society, without inventing her plots from scratch, but rather representing "things that really could happen" (as Jules Verne did), given our technological resources; she gathers information and divines what outcomes might, in a near future, plausibly spring out. See M. ATWOOD, *In Other Worlds: SF and the Human Imagination*, p. 6.

In many psychological theories – such as Carl Gustav Jung’s, Roberto Assagioli’s, James Hillman’s – the collective unconscious is inhabited by symbols and archetypal configurations, which are often substantiated by figural tropes. In the new quantum conception of the mind, promoted by neurosciences,³⁸ the unconscious is often assimilated to – even identified with – the quantum field level, seen as an immaterial platform to our world. Quantum physics makes us also realise that consciousness plays an important role in establishing material reality, and language, when seen as a tool capable of faithfully expressing human intention, powerfully helps to structure our world, notwithstanding the unbridgeable gap between the two spheres.³⁹ In Atwood’s trilogy, one notices several ways in which language is used with a view to reshaping the world: from Adam’s rhetorical approach – in his preaching and via the God’s Gardeners’ hymn book – to Amanda’s visual works of art. Amanda rather aims at deconstructing single words and their respective linguistic channels, possibly choosing to destabilise them. Language is superimposed upon reality in accord with anthropocentric assumptions, thus governing nature-society relations. Amanda’s living pieces are planned to serve as visual meditations about the implications of some basic words. For instance, she arranges dismembered parts of dead animals in the shape of words in order to photograph the scene of vultures tearing them apart. The picture might symbolise the latent conflict between human language and real-life referents, as pointed out by Valeria Mosca,⁴⁰ or the moment when human predominance is overturned to make room for other species. The picture figuratively counterbalances the rudimentary cosmogony of creation offered by Toby to the Crakers in *MaddAddam*, where Oryx – who turned into a natural deity for the Crakers’ benefit – laid two owl eggs, one full of animals and one full of words, and the latter were all devoured by the humanoids, leaving the animals confined to dumbness, as in the previous cycle. On the contrary, in Amanda’s picture, the words – made of animals’ flesh and blood and representing language being construed at the expense of the plurality of animals – are devoured by predatory birds rather than humankind.

Amanda’s artistic activity might be regarded as a third ecocritical position – the other two being Adam’s and Glenn’s – where the poles of semiosphere and biosphere are left free to interact without any patronising induction whatsoever, in order to find alternative linguistic channels and more respectful equilibriums, even at the price of a radical reconsideration of the human status, as dramatised in her living forms of art. It is also relevant that this third modality is put into play by the smart, self-sufficient pleeblander Amanda, the one woman in the novel to bring about a sort of theoretical (on the figurative plane), speculative attempt verging on a bio-eco-ethical vision; maybe she is a fictive authorial representation.

³⁸ The joint efforts of Roger Penrose (a mathematical physicist) and Stuart Hameroff (an anaesthesiologist) have led to a quantum theory of consciousness seen as mediated in the human brain by tubulins (Orc-OR theory: orchestrated objective reduction), while Karl Pribram (a neuroscientist), through his holonomic model of brain, postulates that processes occur in a non-localised way and that memory is encoded in wave-interference patterns. The theory about the holographic nature of the universe originated from a collaboration with David Bohm.

³⁹ Quoting Jacques Derrida, Valeria Mosca claims that Atwood is quite aware of the self-referentiality of discourse and its superimposing upon reality, which is conceivable by humans only through verbal and textual constructs. See V. MOSCA, “Crossing Human Boundaries: Apocalypse and Posthumanism in Margaret Atwood’s *Oryx and Crake* and *The Year of the Flood*”, *Altre Modernità. Rivista di studi letterari e culturali*, 9, 2013, p. 46 ff., <https://riviste.unimi.it/index.php/AMonline/article/view/2985/3163> (last accessed on 31 December 2020).

⁴⁰ *Ibidem*, p. 48.

Even the great physicist David Bohm⁴¹ reflects deeply on how our language affects the very perception of material reality. We know from quantum theory that the latter is a continuous flux (along with the mind) and is not just made up of separate, unrelated objects. Borrowing from older theories, he thinks that languages are structured to convey fragmented concepts, and our brain is consequently trained to perceive the world at this level, for practical and temporary purposes. He even speculates about an experimental verbal form which only uses verbs and derived lemmas, and which he calls ‘rheomode’, apt to favour a different perception of the inner and ever-transforming state of matter. This is based on the premise that it is necessary to go beyond an “atomistic attitude to words”,⁴² allegedly corresponding to an analogous, fragmented conception of reality. The idea is to use the rheomode to emphasise the process rather than the effect, cast as something permanent in the current frame of mind.

Atomism has been functional to represent reality, but, by splitting the atom up, it has been discovered that matter is mainly made out of void – enabling us to credit metaphysical concepts such as Adam’s *no-thingness* with a scientific foundation – and sub-atomic particles can be imagined as waves of probabilities, rather than fixed realities and, as has been conjectured, it is the act of observation that makes them collapse into a more permanent state. This perspective has opened new horizons on how consciousness and intention might help to induce tangible effects. So, verbal or visual constructs, acting as catalysts, might affect the characters’ awareness and, through their actions, ultimately influence material realities. This seems to happen in the trilogy, about which I hope I have given a few hints in the light of a new cognitive paradigm concerning mind-matter relations and affecting many domains besides physics.

4. *Conradian Echoes of the Core Reality*

According to mystics, on the one hand, and to quantum physicists and contemporary deep ecologists, on the other, there is an inner level of being where no ontological divide between animate and inanimate things is admitted, where the so-called barriers between natural kingdoms and species are obsolete. This range of ideas matches with what quantum physics tells us about subatomic levels, adjoining a non-localised and immaterial field into which bosons, photons, and quarks, the basic constituents of materiality, are plunging and resurfacing at unimaginable speeds. Here consciousness and matter are non-locally logged-in, outside space-time coordinates. At this level there exists an ‘implicate’ order, that is the enfolded structure, initiating a constantly flowing stream which externalises into the ‘explicate’, unfolded one, aka the tangible reality, so that, in Bohm’s vision, all seemingly separated things are interconnected and part of an evolving whole.⁴³ The concept of a continuous flux goes back to Greek philosopher Democritus, also a great upholder of atoms

⁴¹ D. BOHM, *Wholeness and the Implicate Order*, London and New York, Routledge, 1980, pp. 39-60.

⁴² The atomistic vision – initially endorsed by Democritus – has been ground-breaking and fruitful for physics. However, quantum physics, closely following the full discovery of atomic structure at the beginning of the 20th century, has produced other and often paradoxical perspectives, capable of shedding new light on ancient spiritual and metaphysical predicaments.

⁴³ The constant flow that involves and connects all aspects of reality in an undivided unity has been called the “holomovement” by David Bohm, meaning that the undivided wholeness is always flowing and evolving.

(5th century B.C.), and to Nāgārjuna (ca. 2nd century A.D.), the most renowned philosopher of Eastern Buddhist tradition. Significantly, the latter used logic to promote the exploration of the subtler layers of being – where, of course, thought is doomed to extinction – which again is seen as a continual stream of interrelated events never to be fixed or isolated.⁴⁴

In Toby's visions, we recognise glimpses of the deeper nature of reality, beginning as "a crinkling of the window glass that separates the visible world from whatever lies behind it" (*M*, p. 271), so that our usual frame of mind, and therefore our vision, reveals its provisional, segmented state. For Toby, the effects of Enhanced Meditation are, in fact, announced by a "wavering, a shift" (*ibidem*) of the usual scenario, the one commonly detected by our senses during waking hours. It is like a *Gestalt switch*, when a character's perspective shifts to other standpoints, in a process that allows insights into an undivided level permeated with a feeling of projection into a whole. In *Oryx and Crake*, the highly specialised and fragmented frame of mind, taken to extremes in technoscientific environments, is represented by Ramona, Jimmy's stepmother: "She wasn't stupid [...] she just didn't want to put her neuron power into long sentences [...] It was because they [his colleagues] were *numbers people*, not *word people*" (*OaC*, p. 28). This is more or less the basis of the great cultural divide between humanistic and scientific disciplines: a gap that might be bridged under the impulse springing from a holistic viewpoint. Basically, our civilisation favours the segmented style of envisioning the world, and this is reflected not only by the way our brain decodifies visual data, but also by the organisation of the entire corpus of knowledge. Conversely, in Toby's enhanced frame of mind, the overall interrelation emerges spontaneously; for instance, she notices the sow's ears and associates them with flowers: "Huge ears, calla lilies", while the piglets' eyes look like red-purple berries: "elderberries eyes" (*M*, p. 273). It is a sort of poetry-like proceeding, but we might also recognise in it a budding capacity to perceive the common matrix underlying natural phenomena.⁴⁵

Forms are possibly encoded at this level – as in Plato's hyperuranian world – from which living creatures and inanimate things alike descend. Crake decides to intervene artificially upon this level by mixing up human genes with those of animals and plants, according to a crucial plan of action subjected to different evaluations. In the *The Year of the Flood*, Ren says that Glenn was called "cyborg" by the youngsters who had apparently perceived his natural vocation (*TYotF*, p. 271). We know there is a voice in the trilogy, epitomised by Jimmy's mother, who is strongly against this line of action. On the other hand, the 'cyborg trend' might be considered from an altogether different perspective. In this connection, Donna Haraway has envisaged in the cyborg's assembly

⁴⁴ Unlike the opposite categories of 'true' and 'false' in Western thought, the traditional Buddhist view also envisages the possibility of an overlapping between truth and falsity (in terms of neither true nor false, and both true and false): we have thus the *catuṣkoti*, "the four corners of truth". Nāgārjuna uses this tetralogy both positively and negatively. In order to better comprehend how it works, Aaron J. Cotnoir stresses the need to disambiguate between a conventional and an ultimate perspective, each of them characterised by its own notion of truth. I add that the distinction between conventional and ultimate reality might echo the Conradian one between 'surface truth' and 'inner truth', to which I shall refer. See A.J. COTNOIR, "Nāgārjuna's Logic", in K. TANAKA et al. (eds), *The Moon Points Back*, Oxford, OUP, 2015, pp. 184-87, and M. ANGOT, *L'Inde classique*, p. 268.

⁴⁵ Characters who have gone natural often present body modifications, physically mirroring aspects of the environment to which they are connected; in fact, the 'gone natural' state of mind entails the overcoming of barriers between entities commonly considered as separated (humanity, animals, and plants). See A. ROCCHI, *L'incontro con la wilderness. Macrofigurabilità e incroci intertestuali da Conrad a Malouf e Patchett*.

of qualities and abilities a great symbol of transcending barriers and binomial systems.⁴⁶

In fictional situations we might also find representations of an access to a sort of inner reality, and thus catch glimpses of a different way of relating to other beings and to the land, beyond the socially accepted frame of mind. For instance, a character immersed in a 'wild' context⁴⁷ might be threatened with loss of bearings and react differently than usual, depending on his/her personal ability to cope. The basic level is represented by cases of *going native*, possibly evolving into *going natural*, a metaphysically charged state, almost transcending traditional binary oppositions between man and the natural world, where the self becomes part of a continuum encompassing all beings, including inanimate things. When a character reaches that interrelational state, compatible with deep ecology theory, he/she tends to lose the illusion of separateness and, at the same time, there ensue phenomena such as an altered time perception, a sense of calm and silence, premonitions and the opening of multiple possibilities, the loss of single-mindedness and the insurgence of multiple focalisation.⁴⁸ Ultimately, access to the deepest level of the self may lead to the 'threshold of the invisible' (in Conrad's words), a place from which oxymoronic formations arise spontaneously (like the former one) and denote a paradoxical locus. All attempts to put the 'ineffable' into words are bound to resort to similar expressions, containing oppositional qualities.⁴⁹

François Warin speaks of a "dark sun", another oxymoronic expression related to the source of being, with which native tribes usually succeed in coping. He claims that, unlike Westerners, they entertain better relations to "the Open that is at the foundation of things";⁵⁰ or, I would say, to a 'bottomless base' that can be fascinating or dizzying and is often spoken of as a void from which the repressed, both personal and collective, might come back with magnified and even genocidal violence, as with the notorious whispers echoing in Kurtz's hallucinating mind in *Heart of Darkness*.

My claim is that, in Atwood's trilogy, an inverse process is set in motion. In fact, the oxymoronic formula 'waterless flood' – which is repeated in a sort of mantra-like fashion

⁴⁶ "A Cyborg Manifesto", by Donna Haraway, was first published in 1985 on *Socialist Review*. The blend of human and technological elements becomes here a figuration of a possible new stage of cultural evolution and integration of sexual, ethnical, and biological diversities, in which the 'cyber' element is shown to disrupt the traditional dichotomies and exclusions ingrained in the essentialist way of reasoning. See D.J. HARAWAY, *A Cyborg Manifesto: Science, Technology and Socialist-Feminism in the Late Twentieth Century*, ProQuest Ebook Central, Minnesota U.P., (1985) 2016, and R. BRAIDOTTI, "La molteplicità: un'etica per la nostra epoca, oppure meglio cyborg che dea", in D.J. HARAWAY, *Manifesto Cyborg. Donne, tecnologie e biopolitiche del corpo*, trad. it. L. BORGHI, Milano, Feltrinelli, (1991) 2018, Ebook, pp. 4-34.

⁴⁷ The term 'wilderness' refers to fluid and indefinite entities with no fixed borders or centre, being connoted as pure spatiality. The realities epitomising it are mainly the sea, the desert, and the virgin forest: to these we can add human crowds, as Conrad himself noticed. See A. ROCCHI, *L'incontro con la wilderness. Macrofiguralità e incroci intertestuali da Conrad a Malouf e Patchett*, pp. 21-22.

⁴⁸ This process might at first be announced by sensations of freezing and petrification and by a sight impairment (through fog, blindness, and so forth). For a detailed illustration of such effects, see A. ROCCHI, *L'incontro con la wilderness. Macrofiguralità e incroci intertestuali da Conrad a Malouf e Patchett*.

⁴⁹ We might imagine that the deepest layer of being would open onto the entire universe like a sort of portal where personal and material existence would touch each other. This possibly recalls the "extime" in Jacques Lacan's terminology – a French neologism standing in opposition to the "intime" – which has also been used by Philippe Lacoue-Labarthe to denote a borderline region of the self opening towards the outside. See P. LACOUÉ-LABARTHE, "The Horror of the West".

⁵⁰ F. WARIN, "Philippe's Lessons of Darkness", in N. LAWTOO (ed.), *Conrad's Heart of Darkness and Contemporary Thought: Revisiting the Horror with Lacoue-Labarthe*, p. 130.

by the God's Gardeners and is further canalised by Adam One's covert, indirect influence on predisposed subjects (like Glenn) – helps to trigger a reversal of the entropic state of society (its 'chaos'). It actually paves the way for a renewing plunge into a primordial state that nullifies civilisation while resetting its harrowing conditions. The God's Gardeners are so convinced that the event is bound to occur as to almost invoke it, in a sort of death drive acted out to accelerate the inevitable, as claimed by Toby herself.

After the genocide brought about by the Waterless Flood, the earth returns to a state of unbridled wilderness where the few survivors are threatened by disorientation and a loss of focused planning ability, like the castaways on desert islands one reads about in colonial and post-colonial novels. When suddenly immersed in a 'wild' setting, these characters generally display a richly nuanced range of reactions, from sheer befuddlement to the awareness of a universal unity, as we can also observe in the trilogy. In *Oryx and Crake* Jimmy is plunged into a desolate environment with no chronological coordinates, as vividly shown by his blank wristwatch ("zero hour", *OaC*, pp. 3, 433). After the collapse of human society, he believes he is the only survivor on a deserted planet, apart from the Crakers. Language is beginning to crumble, loosening its grip on reality, and leaving "blank spaces in his stub of a brain" (*OaC*, p. 4). He starts hearing whispers that affect his mind and recklessly intrude on his consciousness: "He hates these echoes. Saints used to hear them, crazed lice-infested hermits in their caves and deserts" (*OaC*, p. 11).⁵¹ For Jimmy, signifiers are threatening to become like empty shells, losing connection with the signified objects. Words keep popping up autonomously in his mind. This "dissolution of meaning" is like a "drifting off into space" (*OaC*, p. 43). He almost expects to see demons or mermaids coming to lure him towards destruction. Jimmy counteracts this process by clinging on to his memories, looking for a logic to redeem a hopeless situation, and succeeding to a certain extent in giving shape to the "unrestful and noisy dream",⁵² while providing a first account of the disaster. He even approaches the dimension of a kind of spiritually refined experience by appreciating the uniqueness of special moments: "It's a luscious, unreal green [...] he feels a sudden, inexplicable surge of tenderness and joy. Unique [...] There will never be another caterpillar just like this one [...] another such moment of time, another such conjunction" (*OaC*, p. 46). Such "flashes of irrational happiness" (*ibidem*) suddenly irrupt into his awareness, unprepared as he is to consciously process the value attached to them.

Jimmy will eventually collapse owing to an infected foot injury, and remain in a lethargic state for a while, just as Marlow does in *Heart of Darkness*, after receiving the 'paw-stroke' inflicted by the wilderness, another Conradian expression denoting the price the unprepared must pay for being exposed to the great "solitude" or "oblivion".⁵³ The reference to imperial textuality is not inappropriate, the more so as Jimmy himself hints at some prescription relating to a daily routine aimed at "the maintenance of good morale and the preservation of sanity" (*OaC*, p. 4). In this connection, he quotes from "some obsolete, ponderous directive written in aid of European colonials" (*ibidem*). Again, the internalised book asserts the necessity "to avoid pointless repining, and to turn one's mental energies to

⁵¹ 'Echo' is a key word in Conrad's *Heart of Darkness*, recalling the wilderness whispering in Kurtz's experience.

⁵² J. CONRAD, *Heart of Darkness*, in ID., *Youth, Heart of Darkness and The End of the Tether*, New York, Dutton, (1899) 1974, p. 93.

⁵³ Terms recurring in Conrad's text to denote the wilderness, or rather the impersonal level underlying it.

immediate realities and the tasks at hand" (*OaC*, p. 54). Like Marlow, Jimmy is beginning to project a malignant intention onto the bushes ("someone unseen, hidden behind the screen of leaves, watching him slyly", *ibidem*).

Even Zeb, in *MaddAddam*, undergoes a process of mind unravelling and eventually approaches the borderline area where being and not being merge. He has just escaped a Rev's murder attempt and is lost in a forsaken tundra, where he "could sense words rising from him, burning away in the sun. Soon he'd be wordless" (*M*, p. 99). We do not know whether he will be able to think "with no *glass pane* of language coming between him and not-him" (*ibidem*, emphasis added). He perceives the not-him "seeping into him [...] sending its rootlets into his head like reverse hairs" (*ibidem*). He has the impression to soon become "one with moss" (*ibidem*), the impression to incorporate and be incorporated by otherness, by an 'outside' objectified by the overgrown vegetation. In this case, it seems that the linguistic grid might help to preserve individuality. Similarly, the God's Gardeners sometimes went through a so-called 'fallow state', a condition that could range from deep meditation to depression to coma, and they believed that, when into it, one is "sending invisible rootlets out into the universe" (*M*, p. 41). In other words, the person is thought to gather new energy by transcending his/her common psycho-physical limits.

As for Toby's enhanced state of consciousness, it contains the full spectrum of effects detected in characters gone native/natural. She perceives luminous radiations shooting out of things and creating gauzy halos around whatever she contemplates. She also hears amplified sounds resembling voices ("hums and clicks, tapping, whispered syllables", *M*, p. 272), which enhance the experience of a multifaceted frame of mind as opposed to the prevailing, single-minded one. There is an expansion in the region of the heart ("Her heart's becalmed", *M*, p. 273), and also the perception of time is similarly 'widened out' at the crucial moment of the mute dialogue with the pigeon sow. This leads to the perception of many measures of time duration, in an encompassing of incommensurable degrees: "Life, life, life, life. Full to bursting, this minute. Second. Millisecond, Millennium, Eon" (*ibidem*). Every sense is intensified, from sight to smell and touch: Zeb's hand in hers is like "rough velvet" (*M*, p. 277), a slight oxymoron pinpointing the sensory state she has reached, through which it becomes possible to embrace pairs of opposite qualities simultaneously becoming true, coexisting. Even if that level of perception is triggered by ingested substances, it does not mean that the result should necessarily be a total illusion: "Doors are opened with keys" (*ibidem*), she muses.

In the end, whatever the cause of that sensory experience – be it a spontaneous regression, or a chemically induced one – what ensues from it is a real connection with the "wavelengths of the Universe" (*M*, p. 278). Arguably, this perspective does not come from any easy 'New Age jargon', but from new theorisations in physics concerning subatomic particles and their 'incongruous' behaviour – such as the wave-particle duality, providing two seemingly different versions of reality – as seen from our limited binary perception, that is the *surface truth*. Going deeper, towards the *inner truth* (a Conradian echo again), might be like approaching the non-local field and its outward contradictions, or, to put it in another way, the 'creative void' that Adam One compares to God.

So, in my view, in *The Year of the Flood*, the repetition of the formula 'waterless flood' functions as an evocation of the very state from which normally (so to speak) oxymorons surge, as figures connected to the *coincidentia oppositorum*. At that level of being – which one could assess with reference to the quantum field, the quantum potential of David

Bohm, Jung's collective unconscious,⁵⁴ or Adam's notion of no-thingness – we might find pairs of opposing qualities fused together, as though interfacing and merged in a sort of 'primal soup' where binary functioning is not in order or, maybe, is not the only law of nature existing. From this angle, in the trilogy, we might also approach the paradoxical turning upside down of values after humanity's near-extinction, seen as a sort of metaphorical dive into a subatomic level, a plunge into the original undifferentiated broth and subsequent starting of a new cycle. For instance, in *Oryx and Crake*, Jimmy's mother rages against the practice of genetic splicing that mingles genes from different species, particularly the human neocortex tissue implanted in a pigeon's brain. She argues with her husband: "You're interfering with the building blocks of life. It's immoral. It's sacrilegious" (*OaC*, p. 64), condemning the lucrative practice of mingling genes from diverse species or even natural kingdoms. Later on, when Jimmy hears from Crake about "wolvogs", a new dangerous splice "bred to deceive" – since they are engineered to seem innocuous (as with the liobams) – he expresses himself in a way that sounds like his mother's: "he feels some line has been crossed, some boundary transgressed" (*OaC*, p. 241). Both mother and son apparently support the ecological position against the practice of genetic manipulation, which they condemn from a practical and an ethical perspective. Theirs is a warning cry against the violation of certain frontiers, interspecies barriers protecting human and animal features. It is also the challenge upheld by Jimmy's mother as the *Hammerhead*, her code-name when she joined the God's Gardeners as an eco-warrior, after her brave getaway from the golden cage of the gated community. That secret name reveals a streak of fanaticism in her character – possibly suggesting a fundamentalist stance – that sees her unable to mediate between her beliefs and her motherly love for Jimmy.⁵⁵

At the same time, one notices that, after the pandemic has wiped out civilisation, the scale of values has somewhat changed. The new prevailing values of cooperation between species, interspecies justice, respect for diversity and equal relationships, have become viable only because of the very genetical alterations implemented in the previous era by scientists and, most of all, by Crake, who crossed so many frontiers while engineering his Crakers. Although he acts as the main violator of the "building blocks of life" – in Jimmy's mother's words – in the new situation we can somehow appreciate the liberating effects of his experiment, which, in spite of its obvious limitations, has favoured a process of interconnectedness among living forms. The perspective is here upturned, since what was initially condemned has afterwards changed into an opportunity to establish a society based on the acceptance of and respect for diversity. From a phylogenetic perspective – as also summed up in the ontogenetic development of the human foetus – the human race has never been completely pure and strictly separated from other creatures, sharing with them

⁵⁴ Carl Gustav Jung's conception of the collective unconscious was strengthened – especially in connection with his notion of synchronicity – by his intellectual relations with the quantum physicist Wolfgang Pauli, one of his former patients.

⁵⁵ After her flight from the Compound, she led for a while an underground activity using a secret name which, oddly enough, recalls something that Jimmy wanted from her in his childhood, when he provoked her thus: "He wanted her to be brave, to *hammer away* at the wall he'd put against her, to keep on going" (*OaC*, p. 24, emphasis added). And that was what she would do in her secret, rebellious life. The hammer was indeed her chosen weapon: before leaving home, and in order to avoid being spied on, she smashed her husband's and her own computer by using a hammer.

many biological traits, and the already mentioned “building blocks of life” have always been fairly mixed up.⁵⁶

In *MaddAddam*, the hybrid humanoids and the sentient pigeons are protagonists in creating a new interspecies-balanced society. In order to realise this, we should look at the other side of the coin, the flip side of reality, and accept the fact that truth is not given once and definitively, but that we must be open to the revelations brought about by the interfacing, flowing currents of meaning. As with Donna Haraway’s thought, the transgression of binomial divides (human/animal, male/female, body/machine) mixes up qualities and properties, thus bringing about a metaphorical potential to dismantle the practice of submission and exploitation of the ‘other’ – be it in terms of sex, race, species – by the dominating subject. The recurrent oxymorons in the fictional text signal that the game changer has been touched and there is a chance to start another cycle. Such a coexistence of opposite qualities may have different outcomes, which are not likely to be foreseen at the ‘zero hour’, the time when man’s chronological measure dies out, a sort of Big Crunch. But the eventual, hypothetical phase of implosion of the universe has been announced here on a human scale.

5. *A Plural Child Figure: The Children of Crake*

The Crakers provide the locus where the basic ethical perspective is going to be overturned, as suggested by the nature of the door, which is a one-way mirror, ushering in the area adapted for their rearing, in the dome Crake has called “Paradice”.⁵⁷ The mirror is reminiscent of a reversal of qualities (as hinted above), an inverted world, and even of Michel Foucault’s⁵⁸ theorisation of a heterotopia/utopia dialectic.⁵⁹ Roughly speaking, utopia is the ideal, non-existing place, whereas heterotopia is an enclosed, real place, made by man, connected to many others and also to different times (heterochronia). In the French philosopher’s view, a mirror is to be considered as a crossroads, pertaining to both utopia and heterotopia, as it is regarded as a placeless place offering a virtual projection of a real body, while having at the same time a material constitution. The textual image signals here

⁵⁶ The “human is constantly mixed up with the nonhuman [...] [the human] is materially and historically permeable to other natures, other matters, other cultural agents” (S. IOVINO, R. MARCHESINI and E. ADORNI, “Past the Human: Narrative Ontologies and Ontological Stories. Editorial”, *Relations: Beyond Anthropocentrism*, 4 [1], June 2016, pp. 7-9, <https://www.ledonline.it/index.php/Relations/article/view/988/793> [last accessed on 31 December 2020]). The reversal of sense invites us to go beyond the culturally imposed boundaries to human nature, as posthumanism urges us to realise.

⁵⁷ I understand the word as referring to a sort of ‘assisted evolution’, since the pun it contains – ‘para-dice’ – might allude to what is being performed by Crake, i.e., going beyond (*para*) the casual (*dice-like*) process of natural evolution.

⁵⁸ M. FOUCAULT, “Des espaces autres”, *Empan*, 2 (54), 2004, pp. 12-19.

⁵⁹ The optical phenomenon of reflection is also significant in Karen Barad’s vision. A philosopher, theoretician of consciousness and theoretical physicist, Barad regards it as emblematic of a critical thinking based on reflexivity and pursuing objectivity via the mirroring of identical objects held at a distance. Instead, diffraction (another optical phenomenon) is meant to establish a different frame of mind, more apt to mark differences which would be explored from the viewpoint of an internal state, for both scientific and socio-cultural aims. In this new perspective, the outer and detached standpoint, also criticised by Donna Haraway, would be overridden. See K. BARAD, *Meeting the Universe Halfway: Quantum Physics and the Entanglement of Matter and Meaning*, Durham, Duke U.P., 2007.

that we are entering an enclosed space (heterotopia), the secret laboratory where utopian fantasies are enacted, given flesh and blood. The Crakers themselves maintain a sort of dual significance (as we have seen), being palatable to some dictatorship in the old dystopian style and, owing to their composite genome, embodying the champions of a new post-anthropocentric civilisation based on interspecies dialogue. Engineered to be the prototype of a simplified humanity, they betray, on many accounts, Crake's expectations, given their propensity to start their own culture with roles and leaders, a mythology, written texts and so on, as already pointed out by many scholars.

The ending is open, poised on the verge of many possible outcomes, even if the cooperative inclination between the human survivors (the MaddAddamites and former God's Gardeners), the new humanoids (Crakers) and sentient pigeons (human-pig hybrids, with human neocortex implanted) seems well on track. What I wish to highlight here is that the Crakers are acting out the role of the 'child figure' (at least in the central action of the text), both as a group and individually, through Blackbeard, a youngster who develops an emotional and reciprocated attachment to Toby. In many fictional situations dealing with wild settings and with the ensuing borderline states of consciousness – i.e., presenting the syndrome I have roughly sketched above – a child figure might appear and operate as a portal to alternative states of perception, allowing the adult characters to enter deeply into the natural wild sphere, and eventually learn how to transcend human idioms and dualisms. This is what Blackbeard does when he communicates telepathically with the pigeons, serving as an interpreter between the two groups, the humans and "the pig ones", helping them to make peace and also to fight as allies against the evil Painballers; in other words, to fill the otherwise fathomless divide between those species. As other fictional children, the young Craker speaks a language without words, a language of unity, in this case rendered as telepathy, a rather immaterial medium. In this connection, it is notable that, given this faculty, the humanoids would indeed be capable of functioning at a quantum level, for telepathy might be explained via the concept of 'entanglement': the ability to communicate in a non-local way, as subatomic particles do, and as also human brains are able to do, as has been proved.⁶⁰

Unlike other literary instances of the child-figure, which tend to shy away from civilisation, in the end, the Crakers are going to install themselves in a culture of their own, growing into adulthood after having performed their mediatory role, letting us presume that a new form of society is on the way. As hybrid children (Crakers plus *Homo sapiens*) have started to be born, the next phase of civilisation should be comprehensive of contributions coming from the two human groups involved. The child-function, played by Blackbeard, is highlighted in the text by a curious detail that vaguely casts him in the mould of an archetypal configuration. During the expedition made up of human survivors and pigeons, aimed at vindicating the criminals' murderous actions and liberating Adam, who was in their hands, Toby provides the child with a pair of Hermes Trismegistus cross-trainers (relics from a not-too-distant era) to protect his feet from cutting shards on the road. The shoes were endowed with "appliquéd green wings [...] and lights that flash with every step

⁶⁰ The "transferred potential" detected in the EEG of subjects whose partner in the experiment was stimulated with flashes, demonstrated the presence of a brain-to-brain nonlocal correlation, supporting the brain's quantum nature at the macrolevel. See J. GRINBERG-ZYLBERBAUM et al., "The Einstein-Podolsky-Rosen Paradox in the Brain: The Transferred Potential", *Physics Essays*, 7 (4), 1994, pp. 422-28.

he takes" (*M*, p. 423). The attributions of the Greek god, presiding over the communicative sphere, surely fit the fictional situation, giving the child the status of an interpreter, namely a messenger between the two groups against a mythological background. We might mention other branches of Hermes's domain, like the protection over travellers and roads, extending it to exchanges at large, in a way that is consistent with the role of the child-figure, who lays the groundwork for overcoming real or imaginary borders and helps to connect previously separated entities. Moreover, given his *caduceum*, the god also encompasses the notions of wisdom and immortality, the search for the latter being a recurrent motif in the trilogy, approached differently by various subjects. The detail signals that old symbols and traditions are not extinguished in the post-apocalyptic scene, with a corpus of memories still active that is going to inform whatever is about to develop. To the domain of consciousness we might at this point apply the quantum concept that what has been acquired is still maintained at an informative, encoded, collectively available state.⁶¹ In keeping with Dunja Mohr's analysis,⁶² we might say that speculative fiction is strategically posited, since it can trigger a stimulating *multilogue* born from the entanglement of many voices, independent of race and species, and even comprehending those of other beings or inanimate forms, as plants or the earth itself, as viewed from an ecocritical perspective. By representing ecological, transhuman, posthuman and multispecies instances, literature mirrors many socio-cultural themes and fictionally applies to them the framework of ideas that also relate to the new physics, dealing with an all-comprehending flow and a multi-layered state of reality, associated with a faceted sphere of thought and perspectives. Thus, storytelling can contribute to changing culture's reference paradigms by framing them in paradoxical and semi-real situations, whose seeds are already present in our reality, as Margaret Atwood points out. Both storytelling and literary studies have indeed the potential to trigger the *mise en scène* of new behavioural and thought schema, helping to change pre-set beliefs and cultural expectations, as in a fictional laboratory. This is how humanity projects itself ahead, exploring alternatives to the current situation and finding its way towards mental and spiritual evolution.

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⁶¹ According to the new-physics corpus of theory, even when the universe is extinguished, another one could possibly be born already 'clued up', just because the information relating to the previous level would not be lost at the level of quantum potential.

⁶² Dunja Mohr affirms that the exploration of other times and spaces envisaged by literature "offers an exercise in cognitive and emphatic flexibility at a distance" (D. MOHR, "'When Species Meet': Beyond Posthuman Boundaries and Interspeciesism – Social justice and Canadian Speculative Fiction", p. 43).

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