Technological Modifications of the Human Body in Neo-Gothic Literature: Prostheses, Hybridization and Cyborgization in Posthumanism

Abstract: Starting from the premise that the technological modification of human body is a favourite theme in neo-gothic literature, this paper proposes an analysis of the relationship between human and non-human elements in speculative fiction. Interventions on the human body through treatments or prostheses are approached in several fictional works belonging to the canon of the Gothic, to Romanian fantastic literature, and to contemporary SF literature.

Keywords: Neo-Gothic; Speculative Fiction; SF; Fantastic; Post-Humanism; Prosthesis; Cyborg; Frankenstein; Robocop; Romanian Fantastic Literature.

Speculative fiction (fantasy, science fiction, gothic, horror, utopia, alternative histories, etc.) develops both as a literary phenomenon and as a wider cultural and scientific one. The human evolution and the experiences imagined by writers, with data extracted from the concrete situations of the past and present, are topics of applied research or philosophical debate. They are not only detached, but also subjective (especially literary) approaches. In speculative fiction, each gender retains its individuality, although its contour is variable, with many connections. This hybridization of genres is a long-lasting phenomenon, the posthumanist critical approach stimulating the identification of common and differentiating elements. There are writings that can be included in several genres, but the (imagined) human experience in situations out of the ordinary is fundamental. This study aims to examine the open or hidden processes of prosthesis fitting, hybridization and
cyborgization as reflected in fantastic literature.

**Philosophy, Body and Limits**

Challenging the border between human and nonhuman is one of the main themes of the Gothic text. The vampire, the most successful prototype of the gothic monster, can continuously shift his shape, taking both human and animal forms. Transgression plays a key role in the gothic plot. In the neo-gothic text, technology is often perceived as a challenge to human identity. As Justin D. Edwards puts it, “technology generates monsters,” and “the evolution of technology engenders the devolution of life.” The same technological threat is analyzed by Corin Braga. However, the relationship between technology and the evolution of mankind has always been a very complex topic in fantastic fiction, as well as one of the main concerns of the Gothic imagination.

The rather abundant studies on posthumanism are an interesting way of reflecting on human experience in contemporary times. It is an ample cultural (and scientific) current, the discussion being often carried out in academia, but also in mass culture, with a “dark fascination” to the subject. Thus, studying posthumanism as a philosophy (with solid anchors in ethical evolution, above all), cultural products previously considered marginal enter even more strongly in the circuit of debate, diminishing previous academic reticence. Of course, the field of posthumanism is not confined to the cultural or philosophical sphere, but has an extensive reverberation, challenging behavioral ideas in both the inter-human relations and the relation to the animal or vegetal world or material elements.

Another dimension insists on the need for interventions on the human body through treatments and prostheses. Goals can be multiple, including prolonging the length of life, in a plenary, happy life. Indeed, as Katherine Hayles – one of the prominent researchers in the field of posthumanism – states, there is a tradition of human (humanistic) thinking in understanding the human body as prosthesis, the original one, which of course can be changed... Thus we have two ways of approaching this issue, the historical one - from an evolutionary perspective, and the anticipatory vision – from a transformative point of view: “Current transformations of what it means to be human are the result not only of epistemological and ontological shifts brought about by anti-humanist and poststructuralist thought but, much more effectively, of the rapidly accelerating potential for technological modifications of the human body, from its largest outer parts down to its smallest inner components.”

David Roden analyzed these two directions of investigation of posthumanism, starting from controversies about humanism. A first issue identified is that of speculative fiction: “Transhumanists, futurists and science fiction authors regularly concatenate or hyphenate ‘post’ and ‘human’ when speculating about the long-run influence of advanced technologies on the future shape of life and mind.” The other issue is that of the crisis of humanism, which requires a philosophical debate on implications, thus forming an analytical critical stream that discusses the impossibility of effective progress of humanity. Interestingly, the starting point is identified
in the SF novel *Schismatrix* (1996) by Bruce Sterling.

Jay David Bolter offers a synthesis of these debates, regarding the context of human existence in relation to post-humanist challenges: “Posthumanist theory claims to offer a new epistemology that is not anthropocentric and therefore not centered in Cartesian dualism. It seeks to undermine the traditional boundaries between the human, the animal, and the technological.”

**Human, Posthuman, Non-Human**

Speculative fiction contributes to this debate about posthumanism, posthumanity, highlighting either confrontation or transformation, a continuous evolution in fact. As a first observation, posthumanism is defined within the similar area of postmodernism. The prefix “post” has a precise meaning, “after”, which shows that human and post-human are closely related, in fact, the second concept providing a framework and an analytical tool for the former. Understanding the phenomenon is possible by making a parallel to postmodernism. Examining how Lyotard opposes the simple views on postmodernism, Badmington will point out that “postmodernism should not be understood as a historical period, and even postmodernity appears before modernity.” This model of understanding set up by Lyotard, is also approached by Cary Wolfe, who speaks of a posthumanism before humanism or involved in it: “It comes both before and after humanism: before in the sense that it names the embodiment and embeddedness of the human being in not just its biological but also its technological world, the prosthetics coevolution of the human animal with technicity of tools and external archival mechanisms (such a language and culture).” In this way, we can discover postmodern elements in the works of some writers since the nineteenth century, including Edgar Allan Poe. At the same time, we understand the posthuman as a non-human (or non-human, inhumane, as Lyotard calls it).

Representative studies in this field define nonhuman by opposing the term and its semantic field. However, the animal world is the first to be highlighted in the analysis. There is then a broad category of invented elements. Machinery and electrical equipment fall into this category. There are elements belonging to the realm of reality, and another category is made up by imaginary elements. From ghosts to aliens and from mythic monsters to mutants, the palette is very wide. An analysis of the type of relationship that can be established between man and elements with non-human features is necessary. As regards the understanding of the non-human concept, especially in relation to the genre of science fiction, there are some important points recently made by Bruce Clarke, who has a subchapter entitled “From Natural Selection to the Alien”. The animal can be aggressive or, on the contrary, an aid. The bear attacks, but the horse moves things, because it pulls the wagon. The alien is ambivalent. He was imagined in all hypostases, so he can be both a friend and (especially) an attacker.

Besides the transformation of the hero, the gothic space also is in a continuous evolution. If the classical gothic character lives in an isolated location (especially the gloomy castle), in the neo-gothic story he may inhabit the modern city and pass
unnnoticed in the crowded street. As Carol Senf puts it, “the Gothic villain might be our neighbour or even our friend.”

because “the Gothic, which was originally situated in regions that were exotic, remote, and Other, is now located in spaces that are both mundane and familiar or […] ‘homely’.”

**Frankenstein and the Neo-gothic**

Human and non-human can interact and vibrate within the same entity. The monster created by Frankenstein, in Mary Shelley’s classic novel, physically resembles a man, even if he is disproportionate, and he has human vibrations, despite his predatory manifestations. The ability to live powerful, contradictory and destructive emotions proves human ambivalence, in fact an insurmountable psychological barrier, which is observed in many people with criminal offenses. Frankenstein’s monster has several human features, but there are obviously many cases of people who lose their balance and violate, sometimes deeply, moral and legal norms, regressing to a stage that requires exclusion from society, either by killing or by placing them behind bars.

The novel *Frankenstein* is representative of the speculative fiction category, but also of the way in which post-humanist mutations have been inserted since the beginning of the 19th century. A proto-SF writing, *Frankenstein* also is a horror or gothic story that transcends genres. Moreover, recent research shows how this work can be perceived as anti-Gothic, undermining the genre with postmodern elements.

From the posthumanist perspective, this multiple vocation of the monster created by Victor Frankenstein also requires further delimitation. Although this creation is non-human, its appearance and its terrifying actions are constantly reported to people and to the violation of elementary rules of social cohabitation. He does not deviate from the law and the rules of inter-human relations because they do not apply to him. He is a creature of another type, and, as Timothy Morton puts it, “Frankenstein’s creature weirdly typifies what we now consider to be a life form, rather than deviating from it.”

In fact, the monster has the behavior of an automaton, according to the same researcher, linking the (post-human) Gothic and other types of speculative fiction. At this point, it is necessary to introduce the notion of *speculative posthumanism*, developed by several theoreticians, including David Roden, an approach that allows a critical and comprehensive view of the cultural phenomenon called posthumanism.

Manuela Rossini argues for approaching this phenomenon through the permanent cyborgization of the human element, seeing the future through techno-science: “Current theoretical, cultural, and technoscientific trajectories for the future of the human seem to go hand in hand. In the dominant imaginary and increasingly in reality, bodies become infinitely malleable, plastic and liquid, to be performed and invented anew.” The two approaches are not opposed but complementary because, as Roden observes in 2010, “Speculative posthumanists claim that descendants of current humans could cease to be human by virtue of a history of technical alteration.” Other scholars see here a Gothic lineage, making connections in the direction of the model offered by Dr. Victor
Frankenstein, the one who made the prototype of a non-human creature, representing in the posthumanist approach a novelty of race, class or genre. The post-humanist scenarios developed in the area of science fiction include the report to time and to its meanders. In its real existence, human society undergoes an evolution that can be divided into several phases. In fiction, especially in SF, there is no clear distinction between the past, the present and the future, no temporal phase, no time zero, no time of reference, and the reader lacks certainty. We have either an apocalyptic warning projection, such as the depletion of resources or others, i.e. (1) devastating (nuclear) war; 2) terrorist attack (including the biological one, with deadly viruses); 3) accidents (mistakes, biological products out of control); 4) human degeneration (mankind being unable to sustain); 5) extraterrestrial invasions (brutal or subtle). In this context, there is a considerable number of films and series productions on the subject of an apocalyptic future, post-apocalypse being a component of posthumanist interrogations about the future. A distinct group is the apocolypse of the zombies-apocalypse, of the Neo-Gothic essence, in which the human and the post-human are confronted until the total suppression of one of the camps.

From Prosthesis to the Unforgettable

The posthuman is a concept that allows an analysis of what may happen in the future, drawing an image of the human, with components and skills that go beyond the realities of today. It may mean physical prosthesis, as we have seen in E.A. Poe’s The Man That Was Used Up. An extremely complex writer, Poe imagines General John A.B.C. Smith’s reassembly. He moves from the real plan, that of describing the fiction through the reporters’ eye, and presents unrealistic actions both in his present and in the future. In Poe’s text, the legs and hands are first attached to the body, then the human shape is completed with the eyes, and finally with the palate. It is a succession that highlights the importance of prostheses, the most delicate being placed at the end: “Pompey, you black rascal, squeaked the General, I really do believe you would let me go out without my palate.” The black servant executes the general’s orders promptly, and the voice comes back to the general. Both eye and palatal transplantation are today an unresolved problem. Interestingly, all of these material elements are attached to something indecisive, as the author himself says, the human body, rising from the pile of things in the middle of a room. This is a radical physical prosthesis, possibly literary (as fiction), and in reality only to a certain extent.

There is an industry of bionic hands, pacemakers, epilepsy implants, “smart” drugs, all of which need promotion, in order to attract the attention of investors and politicians. Prosthetics can also be mental, psychical, that is, an addition of unusual memorizing and reasoning capabilities for known human subjects of the past and present. Some special human abilities make some people special in report with the others. Records of any kind (including sports) fall into this category.

Sometimes some very rare diseases may be transformed by individuals into tools to survive or overcome the usual human condition. Unforgettable, a well-known American series in 2011-2014, portrays the case (and cases) of Carrie Wells, a New
York police officer who suffers from Hyperthymesia, a neurological disorder that does not allow her to forget anything of what she sees, and this helps her in investigations. The series is not in the SF category because Hyperthymesia is a real disease, even if very rare. The ability of these people to remember and bring back to mind many events in their own past is somehow weird, as it is an activity typical for machines and computers.

This type of posthuman mental capacity augmentation is present in the story O chestiune de educatie (“A matter of education”) by Romanian writer Liviu Surugiu. The story starts with the classic image of the arrival of a cosmic ship on a distant planet, being an ordinary event. It is a process by which the author creates the illusion of normality in the diegetic universe imagined by him. It’s a trap here because some happenings on Ghanymondo are exceptional, even for this special world. The mutations bring not face to face, but together, the representatives of three ages of mankind: the Neanderthals, the medieval monarchs and the contemporary New Yorkers to the reader of today. The author proves to be innovative in terms of personality transfer, building on it the climax of the text. The reference is to a twin personality transfer operation, a process in which one kills the other, committing a crime, and there is a suspicion that it was actually a suicide in the middle. The phenomenon allows (or at least promises) the emergence of a new human generation, one from the past of mankind, in a process of simultaneity with those already existing on Ghanymondo.

**Robocop and the Cyborg**

The cyber implant is used as a motif in the Robocop films. From this series, five long-lengths and three series have already been cast. It starts from the fact that the (honest and devoted!) policeman Alex Murphy was seriously injured while he was on duty. His life could only be saved if prostheses were fitted in a part of the body. Thus, Murphy becomes Robocop, a cyber-policeman. His ability to think and act is enhanced by the attachment of digital elements, gaining in physical strength as well. Murphy is effectively armored, and, under this shield, elements capable of enhancing his physical strength are placed. Its appearance is only human when it is dressed in his armor. When he removes his helmet, the view is desolate, the loss of the elements of human body being evident.

Robocop, however, proves his intense feelings, empathy and attachment to human values, this being the optimistic message that such productions want to convey. It is a posthumanity that is continuously re-humanizing. Donna Haraway has theorized this ascension of the cyborg without seeing it exclusively technologically, but also as a metaphor of contemporary existence: “She offered the cyborg as a contemporary cultural metaphor in order to capture the ambivalent condition of the contemporary human beings, whose bodies are open to forms of technological modification and intervention.”

Robocop is the already classic image of the cyborg, a defining element of science fiction in its hard form. In recent decades, with the expansion of postmodernist discussions and polemics, after the conceptual recycling and reinvention, more theoretical than practical, of Post-Marxism (clearly distinct from post-communism), alongside with the feminist current, the cyborg can be seen as a guiding element in the field of
reflection on posthumanism. How much is human in its structure and to what extent do the other components matter? How and what is the Cyborgian non-human, and to what extent is it more human than the classical human structure? Does he have his own personality or not? Is this creature an evolution, a recognizable linear progress or something new, a creature and a creation with so many novelties that it can break the origins and can mean a new beginning for a new species? There are several difficult questions with difficult answers.

**Prostheses, Transplants and Implants**

As we have seen, prosthesis means replacing organs with others from often synthetic materials with a different composition than the human body. Transplantation means replacing a diseased organ with a healthy, not identical, but similar. However, the implant can be a mechanism (equipment, device, etc.) that stimulates the activity of some organs. We could distinguish between two situations: 1) stimulating the affected organs to function in normal conditions (a situation specific to everyday life, if we think about the cardiac implant, for example); 2) the implants in order to determine the increased activity of some organs (in order to transform individuals into super-soldiers or super-worker - people with increased resistance): this kind of actions are present in imaginary worlds, in fictions. The step toward fiction (implicit in science fiction literature as well as in futuristic scenarios with many real and / or possible elements) is made when the authors imagine transplantation for organs that cannot be achieved at the current (technological and medical) stage. Brain transplantation is the main challenge, a possibility that has also led to an intense debate about keeping personal identification elements, such as the personality. There is a wide range of implants in reality, from breast enlargement to medical ones, to stimulate the functioning of some organs. The implant may be seen as a move from human to posthuman when an ordinary person acquires increased physical and mental abilities by using these devices that are embedded in him or her. This is the step towards the representations designated by the general term cyborg.

The Cyborg is seen as a man-machine combination, the term resulting from the collision of the cyber element with an organism, also found in the human bionic expression (the bionic man), this name being used mainly in medicine. Merriam-Webster dictionary gives the following meaning for cyborg: "A person whose body contains mechanical or electrical devices and whose abilities are greater than the abilities of normal humans." The Cambridge Companion to the Science Fiction does not pay special attention to the cyborg itself, which it assimilates to the robot or the android. The cyborg is perceived (both in reality and in fiction) as a symbiosis. This means that it can exist at different stages, when either the human or the mechanical-electron part prevails.

The preservation of biological elements, characteristic of the human body, seems to make the difference between cyborg and android. Dictionaries define the android in perfect synonymy with the robot, with the mention that the machine must have a human aspect. Other synonyms for android are humanoid, technological man, as well as automaton or golem.
Dănuț Ungureanu’s *Dragostea la căpușe* ("Love according to Ticks"), one of the most successful Romanian science fiction works, also tells the story of people who had prostheses fitting. The story is reported by a doctor sent on the intergalactic front. After a period of sharing analgesics, the doctor becomes a surgeon, with the task of treating the wounds suffered by human combatants. He does more than that: he rebuilds some of them from pieces gathered in a bag after being scattered by explosions. He then focuses on the adventures of some members of special teams who hunt “ticks”. These are mutant devices imagined by an alien civilization to be used as weapons in confrontation with the human beings. They have a special disguise capability, being primarily designed to gather and transmit information, so they are used in espionage. They explode only when they were discovered. The story of D. Ungureanu is particularly ingenious and alert, although the author resorts to the intertextual techniques of the story in the frame. Some stories (narrative nuclei) are told by the doctor, who does not narrate an action that he witnessed but one of a reporter’s record. There is a time when these special people, who have been rebuilt so many times, pass away.

We identify two cyborg manifestation fields in this narrative: firstly, in the human sphere, where prostheses and permanent transplants rebuild the ability of the characters to function without adding to their forces. The evolution to the post-humanist (physical and cultural) stage is obvious. Secondly, alien elements have the ability to mimic the human, which represents a new challenge to the (post)human imaginary. There are elements that show an evolved cyborg, which invites us to read Donna Haraway’s thoughts about these biomechanical appearances stubborn to overcome their status. These ideas are set forth in the very opening of her book on humanoid, cyborgs and ... women: "A cyborg is a hybrid creature, composed of organism and machine. But, cyborgs are compounded of special kinds of machines and special kinds of organism appropriate to the late twentieth century. Cyborgs are post-Second World War hybrid entities made of, first, ourselves and other organic creatures in our unchosen ‘high-technological’ guise as information systems, texts, and ergonomically controlled labouring, desiring, and reproducing systems. The second essential ingredient in cyborgs is machines in their guise, also, as communications systems, texts, and self-acting, ergonomically designed apparatuses."

**Frankenstein’s Monster and Cucoaneș**

Disease can bring the end of the world. Some epidemics can no longer be controlled, and writers have always tried to prove this, warning their readers. It is enough to go back to Mary Wollstonecraft Shelley, one of the most vigorous science fiction authors, even when the genre was formed in its core frames. The author of *Frankenstein* also wrote the novel *The Last Man*, a dystopia about the future of mankind. It is a slow, relentless apocalypse, such as the one envisaged by Jean Baudrillard. In Mary Shelley’s vision, mankind dies from the disease in 2100, the typhus being the plague impossible to fight. It is easy to see that the author was wrong, but in 1818, when she was building the first part of the novel, these dangers were present and ravaged.
In the novel *Un om mare* “A great man”, a science fiction writing from beginning to the end, Mircea Eliade presents such a case, but as a reverse and contradictory evolution. Cucoaneş, his hero, grows unbelievably, reaching the stature of a giant, aspect that will be linked to gigantism, a term connected to the medical field. That this is a disease is clear from the outbreak of this giant. When his friend asks him to return to the clinic, at least for the specialists there to have the opportunity to study him for the “progress of science”, Cucoaneş gives the following reply: “I am perfectly indifferent to the progress or regression of science. I am interested only in one thing: to heal myself! And I see that I cannot...”1

It is a cry of helplessness and despair, because its size already above average creates problems in the relationship with his fiancée Leonora, as the couple looks ridiculous together. Soon the character gets extremely tall, and when he has three meters, he decides to leave the civilized world and to escape into the mountains. It is an imposed isolation, a posthumanity as a painful post-civilization, but the only possible one. Mircea Eliade, however, imagines a surprising involution, for as he rises (six or seven meters or more!), Cucoaneş loses his human attributes and becomes unable to speak, losing his limb (and thinking) mobility. He becomes a lonely giant, incapable of communicating, but his posthumanity is not aggressive, predatory, for in his wanderings he always takes care not to crush under his feet the places where there are human activities.

As a conclusion, we can observe that in spite of all physiological or technological transformations, the heroes of speculative fiction stick to features of human nature, keeping their humanity as a sign of their deep identity, hidden under their protheses, cyborg physiognomies, or monster aspects.

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Notes


3. “Authors of antiutopias often populate their post-apocalyptic worlds with characters or groups of survivors that suffer anthropological, moral, or spiritual mutations. Technological and genetic manipulations engender robotic (Karel Čapek) or mechanized individuals (David Bunch) and decerebrated (T. J. Bass) or post-human mutants (Margaret Atwood). In these antiutopias, post-humanity is usually not only the heir but also a witness to the extinction of the human race...”, Corin Braga, “Antiutopies apocalyptiques et posthumaines,” Caietele Echinox. Posthumanist Configurations, 34 (2018), 241, http://phantasma.lett.ubbcluj.ro/wp-content/uploads/2018/04/CaieteEchinox34-2018-pp.241-254.pdf.
10. See Neil Badmington, Teoretizarea Postumanului “Theorizing the Posthuman,” and Stefan Herbrechter and Ivan Callus, Ce este o lectură postumanistă (“What is a posthumanist reading”), Posthuman, 1 (2014).
33. See *Cambridge Dictionary*: “In science fiction stories, a creature that is part human and part machine” (http://dictionary.cambridge.org/dictionary/british/cyborg).
34. www.merriam-webster.com/dictionary/cyborg