ENHANCEMENT, COGNITION, AND SIMULATION OF SOCIALITY: INVESTIGATING HUMAN-MACHINE KINSHIP AND DICHOTOMY IN TECHNOLOGY-MEDIATED ERA

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ABSTRACT

Posthumanism, regarded as a panacea to the ills of the modern era and many conventional ideologies of Western metaphysics, proposes a new conception of totality, man, and human bondage with other existent and imaginary non-humans, including animals and technological beings. It gives a-critical acceptance of technological promises while measuring human-animal and human-machine symbiosis, which is an interaction between two different organisms living in close physical proximity that often benefits both. This change of perspective in representing the social, cultural, and evolutionary upgradation of humans as well as other beings and entities would be, thus, deliberated as a paradigmatic shift in anthropology, as it indicates total contamination and hybridization of humans with others, proposing the elimination and fluidification of corny boundaries and welcoming new entities to re-modify their present bodies and living conditions. The present paper analyses three texts namely, Isaac Asimov's short story "Robbie" (1950), John McCarthy's story "The Robot and the Baby" (2001) and Carole Stiver's fiction *The Mother Code* (2020) to exhibit the scenic symbiosis of humans and machines in the contemporary postmodern era, where enhanced

machines are engaged in simulating the versatile roles of humans and try to represent themselves as cognitive entities that may have the power to understand human emotions and motives. These entities portray themselves as rational beings capable of caring for the elderly, newborns, and young children by unwavering dedication to their vocation. Besides, the present paper also examines people's dichotomies in confiding inanimate automated technologies in crucial social roles, imagining unwanted problems that may sometimes threaten their lives and communities. Their hesitation stems from a psychological conflict between static and fluid thought processes that sometimes motivates them to embrace earthly advancement while, at other times, dissuades them from pursuing sophisticated technologies owing to their imbecility to accept that paradigmatic shift in their stabilized belief system about fixed social roles alongside the potential dread involved in this overall process of technologization.

Keywords: Posthumanism, symbiosis, hybridization, simulation, cognition, evolutionary upgradation, dichotomy.

I. INTRODUCTION TO POSTHUMANISM: RE-CIRCULATING SOCIAL DIVERSITY

The twentieth and twenty-first centuries have witnessed the re-incarnation of many traditional '-isms' "to overtake a reality that appears as antiquated, as if the "post" (that has been disclaimed the various post-modern, post-romantic, post-structuralist, etc.) should necessarily indicate a situation of positive development, a possible release from an oppressive and limiting condition" (Valera 481). Post-humanism, like those of '-isms,' has emerged to modify Humanism along with its loopholes that place humans at the top most hierarchical position, devaluing all other species' ontological existence. Like Post-modernism that "is free from the backwardness of the modern age, presenting itself as a very innovative thought, as something that can upset the current state of things," post-humanism has "the upper hand on those that are anchored to an "antiquated" model of human nature, trying, at the same time, to unseat a "traditionalist" ontological conception" (Valera 481-82). "This philosophical post-humanism does not, therefore, result in anti-foundationalism. It rather stresses the need for process ontology" (Braidotti 7-8). It is a new conception of totality, man, and everything offered as a panacea to the ills of the modern age and traditional Western metaphysical thought. The posthumanist philosophy imposes an unprecedented transformation of mentality that is incomprehensible in light of the preceding paradigms. Contemporary transhumanists, one of the forerunners of posthumanist ideology, contend that human nature is an inadequate "work in progress" that should be altered through technological means where the instrumental benefits to individuals outweigh the technological hazards. They "want us to get on the way to "posthumanity" by going beyond humanity in its present form. Transhumanists want us to enter upon a process that will ultimately lead to "posthumanity" by attempting, now and in the near future, to transcend certain limits inherent in the human condition as we know it" (Birnbacher 95). If the transhuman is a being of passage that retains some aspects of human nature, albeit enhanced and amplified by technologies, the posthuman is something entirely new that unquestionably surpasses the human frontier to the point where it no longer resembles the Homo Sapiens species. Rather, it might be the composition of a post-singularity planet that would be incomprehensible to humans (Valera 483). It will be an era where there will be the total elimination of differences; "post-mankind lives in harmony with other living (and non-living) beings, establishing a sort of open system" (Valera 483), where one

can foresee the gradual eradication and fluidization of distinctions rather than the hyper-technological appliance of the human being, as Stefan Herbrechter explains in a review of Braidotti's book *The Posthuman*, "What Braidotti refers to as the posthuman predicament, or living in the times of the posthuman, requires humans to think beyond their traditional humanist limitations and embrace the risks that becoming-other-than-human beings" (2). Therefore, posthumanism is annihilating all the boundaries existing between humans and other beings. "In the posthumanist thought, the human is no longer [...] the adoption or the expression of man but rather the result of a hybridization of man with non-human otherness" (Barcellona 54).

Therefore, "posthumanism is going in the direction of a restoration of the natural/artificial fracture by mixing technology with the living world, thus aiming to overcome the Cartesian dichotomy nature/ culture" (Valera 487). This dissolution of boundaries that the posthumanist discourse aims to re-configure may bring the possibility of total contamination of humans with other entities. This openness to others is the demarcation of boundaries that redefine humanity, incorporating all non-human beings/entities, including animals and machines, resulting from the species' continual evolution. The techno-human world that posthumanists hint at includes robots, cyborgs, and AIs. All these entities are programmed with a few special codes and are governed by artificial intelligence. A robot, as defined by The International Organization for Standardization, is an "actuated mechanism programmable in two or more axes with a degree of autonomy, moving within its environment, to perform intended tasks" (1). Their primary purpose is to execute the tasks with which it is programmed. It "doesn't need to […] [have] a specific shape or function; it's […] any motion with [a] certain level [of] autonomy, certain level of control […] and a certain communication form […] and mobility" (Cheon and Su 379). Whereas cyborg, as expressed by Bolter while analyzing Donna Haraway's "The Cyborg Manifesto," is "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" (2). Donna Haraway uses this cyborg posthuman figure as a rejection and reconfiguration of the human subject that is, in a way, helpful to re-explore the overlapping boundaries existing between humans and non-human entities and to "maintain the tensions and possibilities of technological mediation that can be productive even at the political level" (Bolter 3). In fact, the posthumanists attempt to assault the radical division between humans and non-humans theoretically, ensuing a positive technological framework that "might enable us [humans] to make far-reaching alterations not only to our physiology … but also to our intellectual and emotional capacities" (Harari 403), which in a way helps to "redefine our [humans'] existence with this shared-world not as sovereigns but as equals" (Bolter 4), supposing "the possibility of human realization [that] lies in the ability of man to go beyond himself, that is to recognize the irreplaceable value of co-existence and collaboration with biological or technological diversity" (Valera 488).

II. EMERGENCE OF SOCIAL ROBOTS AND THEIR INTER-RELATIONAL ROLE

Throughout science fiction cinema and television, social robots, "defined as robots that interact and communicate with humans or other agents by exhibiting social behaviors and following norms, have exploded in popularity in recent years, with a rapid growth in the development of research prototypes and in the commercialization of devices" (Prescott and Robillard 1). These entities depict a "near future where androids called 'synths' are used as

helpers, carers, workers and servants" (Teo 96). They are dependable, punctual, and frequently have eccentric qualities. A few science fiction movies and TV shows like *Silent Running* (1972), *The Hitchhiker's Guide to the Galaxy* (2005), *Almost Human* (2013-14), etc., have explored the potential and ramifications of robots engaged in the tasks of caretakers. These movies could be fictitious reactions to the growing number of robots in healthcare, particularly in caregiving roles. The number of elderly individuals in the populations of Japan, Europe, and the USA is "beginning to overtake the numbers of young people" who can provide care to them, claim Sharkey and Sharkey (28). Non-humanoid robots even include animal-like devices like the playful robotic dog Aibo from Sony (redesigned and relaunched in 2018), the seal-like Paro designed to provide a calming effect on residents of long-term care facilities, and the bioinspired robot Miro-e intended for use in therapy and education. Social robots are being employed in education as co-learners or tutors to support the development of social skills and other cognitive and affective outcomes. A special focus has been on populations that face issues with sociability and attention, such as children with autism spectrum disorder (ASD). As an alternative to animal pets, social robots are becoming increasingly popular as housemates because of their proven ability to lessen feelings of loneliness (Prescott and Robillard 1), either by playing with humans or staying close to them like close mates. In Isaac Asimov's short story, "Robbie", Gloria and Robbie's playing with each other and behaving amicably can be substantial evidence of how a robot can help accompany humans and reduce loneliness through its engagement with humans in various sport activities:

Gloria shrieked in dismay. 'Wait, Robbie! That wasn't fair, Robbie! You promised you wouldn't run until I found you…'Robbie can't run! she shouted at the top of her eight-year-old voice. 'I can beat him any day. I can beat him any day. She chanted the words… Then she was down in the grass again, leaning against Robbie's leg and still holding a hard, metal finger… I'm tired of playing hid-and-seek. I want a ride'… But Robbie was hurt at the unjust accusation, so he seated himself carefully and shook his head ponderously from side to side… 'Please, Robbie, please give me a ride'. She encircled his neck with rosy arms and hugged tightly. (Asimov 5-7)

Gloria's pleasant interaction with Robbie in acceptable manner, without the pre-ordained human bias that Robbie is replacing her human mates and curtails her circle, calls in mind the attempt of a group of researchers who used a dozen of empathetic robots as teaching tools for school students, after receiving a huge amount of fund by the European Union's Platform Seven Agency, stating that "The goal of LIREC [Living with Robots and Interactive Companions project] was not to build robot companions that replace human contact, but rather to design companions that fulfill their tasks and interact with people in a socially and emotionally acceptable manner" (Castellano et al. 1). Gloria's innocent but hearty approach toward the mechanical robot considering it a friend defines the social and emotional acceptance of robots in human lives, which in a way help both of them to humanize themselves, know each other's bodily mechanism and their special traits. Robbie who, through her deep dedication to Gloria and her feelings, has been trying to humanize Gloria; it is she who attracts Gloria's attention towards her and makes her believe that she is not an object to be despised or feared, rather loved and doted on. LaGrandeur has written about the humanization process that "Robots need to exhibit empathy, and they also need to inspire empathy for themselves in humans; in other words, robots need to enable humans to imagine themselves as the robot—which means humanizing the robot in their

minds" (103). This humanization, as reflected in the text, provides a deep insight into the ontological idea that "people are positively disposed toward social robots and interested to engage with them" (Prescott and Robillard 3), and thereby challenges the pre-existing notions of machines bringing up uneasy sentiments by, maybe, igniting concerns about losing identity as humans, and the machines' potentially dehumanizing effects. The machines, quite the contrary, might present them as physical entities subject to laws of physics like gravity, as purposefully made objects, or as deliberate agents acting logically and in line with internal objectives (Prescott and Robillard 4). They might "become more advanced…are capable of performing tasks that were previously done by humans" ("The Impact of Technology"). Therefore, this technologically-enhanced civilization believes that "By creating an AI robot that can perform perilous tasks on our behalf, we can get beyond many of the dangerous restrictions that humans face. It can be utilized effectively in any natural or artificial calamity, be it going to Mars, or defusing a bomb, or exploring the deepest regions of the oceans, or mining for coal and oil" (Duggal). "In addition, A.I. cannot purposely harm humans. It runs counter to the international A.I. Programming laws: No A.I. shall lie to humans. No A.I. shall kill humans. No A.I. shall purposeful-" (Cole 19), echoing Mr. Weston's (Gloria's father) optimistic and defensive statement while arguing with his offensive wife, "A robot is infinitely more to be trusted than a human nursemaid" (Asimov 12). In fact, through characters like Gloria and her father, Asimov escalates the alacrity of techno-humanity. It stimulates an ideologically thought-provoking conception that artificial entities that have been trying to be human-like by comprehending human behavior and action may be humans' next-generation species evolving over time into novel and modified beings/entities. In this context, while discussing the development of the robots over time, Alyssa Cole says about a robot humanoid, "Soon you'll understand more, and if you don't, you'll have your own words to ask for clarification. It just takes time" (Cole 69). To Cole, it is a matter of time when the robots will evolve themselves as more trusted entities alike humans who, in turn, accept them either as free individuals or as separate intelligences sharing the same environment as well as emotion, love and care.

Just as, the nursemaid robot has been doing everything to make Gloria happy and fulfill her wish, trying to understand her mode of interaction, emotion, anguish and dissatisfaction. This care of the robot for the human Gloria is possible as she starts to share everything with Robbie. LaGrandeur's argues in one his papers namely "Emotion, Artificial Intelligence, and Ethics" that "whenever the human shares things with the robot, as he or she would with a human child, the bonded robot, like a child, would learn to share in return, triggering a learning experience that would initiate an evolving, recursive loop of benevolence between it and humans" (102). His point is the more humans start to share anything with the machine, "the machine would become automatically socially bonded to that human" (102). Therefore, both Gloria and Robbie share a "dyadic relationship," a term used by Georg Simmel to refer to an affectionate investment by both the people, to form an emotional bonding, that, though seems to be somehow complex, depends on inter-relationships, which can make them not only safe and happy but also harmless and loyal, which Rossler names "benevolence," that is not simply a behavior but "a complex ethical stance, a conscious decision, based on a constellation of emotions, experience, and reason, to act for the benefit of another" (102). Hence, it hints the formation of a techno-human relationship where both humans and artificially intelligent entities will try to understand the other. Even, various

researches have indicated that "when anthropomorphic robots mirror the facial expressions and body movements of the human with whom they are interacting, it encourages the human to develop empathy with them" (qtd. in LaGrandeur 103). Ian McEwan, one of the renowned writers of contemporary times, has visualized the same relationsip in his novel *Machines Like Me* (2019). As Adam, the humanoid character, proposes:

… we'll understand each other too well. We'll inhabit a community of minds to which we have immediate access. Connectivity will be such that individual nodes of the subjective will merge into an ocean of thought … As we come to inhabit each other's minds, we'll be incapable of deceit. Our narratives will no longer record endless misunderstandings…. I'm sure we'll treasure the literature of the past, even as it horrifies us. We'll look back and marvel at how well the people of long ago depicted their own shortcomings, how they wove brilliant, even optimistic fables out of their conflicts and monstrous inadequacies and mutual incomprehension. (149-50)

Therefore, posthumanism introduces an evolving world shifting from pure-humanity towards techno-humanity or hybrid-humanity where "interaction of humans with technology, especially artificial intelligence, leads to the merging of human and artificial identities, creating a process of hybridization of identity" (Veliyev 52). This hybridization can only be possible when humans try to redefine the boundary existing between humans and other non-humans, including animals and artificial entities. "If that occurs, then perhaps new, hybrid AI-Human kinaesthetic processes will evolve, as well, and that sort of spontaneous, random change would create its own sort of hybridized kinaesthetic dynamic" (LaGrandeur 107). Therefore, posthumanism has been celebrating the co-existence of humans and other entities and accepts life as "a process of becoming through new connections and mergers between species, bodies, functions, and technologies... Human life is about becoming, but a becoming with other life forms" (Nayar 47). This creates "an opportunity to empower the pursuit of alternative schemes of thought, knowledge and self-representation" (Braidotti 12).

Child-rearing and Nursemaid Robots: An Alternate Way to Rethink Societal Bonds

While defining the nature of a care practice, care ethicist Joan Tronto said, "the notion of a care practice is complex; it is an alternative to conceiving of care as a principle or as an emotion. To call care a practice implies that it involves both thoughts and action, that thought and action are interrelated, and that they are directed toward some end (108). Following this, Tronto makes an effort to interpret a care activity (also known as a care practice) as goal-directed since it is intended to achieve a certain objective. Take, for instance, the surgeon, whose job it is to do surgery, or the anesthesiologist, whose job it is to administer the appropriate drugs at the exact dosage during a procedure. However, a few of care ethicists have maintained that the majority of care activities follow the practice-oriented description given earlier in this work. According to Vallor (2011), care activities serve as a platform for the development of both the necessary care skills and the abilities needed to become an empathic person. According to Van Wynsberghe (2012), care activities serve as the means by which care values are realized. Consequently, care activities, or at least parts of them, are about much more than the exterior goals they seek to achieve; those activities, also possess a practice-focused mindset. By stating that the core care values align with the moral components of Tronto's phases of a care practice, van Wynsberghe has emphasized the significance of the practice-oriented nature of care activities in the wake of Tronto. These components include

competence, responsibility, awareness, and reciprocity. They are the foundation of a care practice and serve as a means of distinguishing between quality and subpar treatment. According to this viewpoint, excellent care is provided when a care task is completed competently and attentively by a moral agent who can accept accountability while allowing the care recipient to respond (Sio & Wynsberghe 1751).

Today's digitally advanced world engages artificially manufactured entities such as robots, cyborgs, and AIs as caregivers for a few children in the absence of their biological mothers. This transference of a social role has been gaining traction in society, particularly when the biological mother is seen as restricted or not fulfilling her social role due to one or the other reasons. She may be physically incapable of handling the child or may not have sufficient time or is addicted to drugs that could harm the child. John McCarthy's story "The Robot and the Baby" graphically projects this role replacement, wherein a domestic robot is shown engaged in taking care and welfare of a baby, while the baby's biological mother is shown addicted to drugs. She instructs the nursemaid robot to "Love the fucking baby yourselves" (McCarthy 343). This abusing statement not only calls into question her emotional attachment to the child but also ironies the concept of 'motherhood.' Unlike the human mother, the robot nursemaid emerges as an active agent to shoulder the responsibility of the baby's protection and nurturing. Such re-presentation of the robots as caregivers may tend to create artificial mothers in the future by the corporate agency, a standing body engaged in producing artificial entities and, at the same time, chiefly instrumental to facilitate a society amalgamating humans and machines.

The nursemaid robot maintains a strict discipline while engaged in taking care of the baby, such as, it "spoke as little as was necessary for their functions and in a slightly repellent metallic voice not associated with either sex" (McCarthy 345). The robot nursemaid's neutral voice that is neither male nor female attempts to detach the ideas of 'mothering' and 'nurturing' from the 'gender' specific role of a woman. At the infant stage, a child is only acquainted with the image and voice of the mothers/caregivers, as explained by Freud while analyzing the psycho-social stages of development and Jacques Lankan as three main registers of psyche. In this stage which Jacques Lankan terms "Mirror Stage" or Sigmund Freud calls "Oral Stage," the child, that gets pleasure through its mouths, associates itself with the caregivers' image and voice; any harsh sound makes the child cry but fine sound makes the baby laugh make it feel delightful. At this stage of development, the gender and identity of the caregiver is less important to the baby than the caregiver who provides it comfort; whether the caregiver is a male, female or machine, it does not matter. In the story, when the robot nursemaid is nurturing the baby instead of its human mother, the baby neither cries nor feels distress; it gets proper treatment from the nursemaid either in terms of food, care and comfort. Representation of robotic figures in such social roles might enhance the possibility of a future genderless sociality, wherein only women may not be responsible for raising children; instead, any being and entity whether male, female or gender-neutral artificial figures like robots, syntecs, and AIs can raise children. If it can be possible, some researchers argue that it can reduce the complexities that women have to face during the time of their pregnancy, childbirth, and mothering, which symbolize a critical stage in a woman's life, with profound effects on her physical, mental, emotional, social, and cultural well-being that make people more susceptible to violence (Bjelica 102-6). Instead of receiving respectful care, which is a globally acknowledged right and a key tactic for

improving healthcare quality and results (Afulani 1692-3), women have, sometimes, to encounter patriarchal exploitation during these phases of life enkindling unpleasant experiences that may have tremendous effect on the standard of care and the health of the mother and the child, both directly and indirectly (Dullo 10). Therefore, representation of robotic caregivers has the possibility not only to lessen women's complexities and distresses but also it helps to deconstruct the role of women in raising a child in posthumanist society, reconfiguring it in a new light of personhood, a broad and open idea to include the sociability of non-human entities considering them as an individual having alter intelligence. The identity of the caregivers whether they are humans or the machinic entities does not matters; what matters is their individuality, on the basis of which any type of intelligence, artificial or humans, survives over time. This concept, called "spatial Darwinism," introduced by Otto Rossler in his 2004 article "Nonlinear Dynamics, Artificial Cognition and Galactic Export," describes "how any living things survive, not as a species over time (which is Darwin's theory), but as individuals in one lifetime" (qtd. in LaGrandeur 101). According to Rossler, living entities must constantly adapt by moving through space at the right time to locate essentials like food or mates. This would operate by using algorithms to direct a robot's "autonomous path optimization," which Rossler compares to human emotion in how it functions to meet its needs. To put it another way, Rossler views emotion as a result of primal urges and as an adaptation required to satiate them. Thus, if bonding is linked to basic drives and requires that a specific human be viewed as essential to its survival and valuable in and of itself—what Lorenz referred to as "the animal with home-valence," or more simply, a mother figure—programming a machine to remain close to a human is comparatively simple (59).

Therefore, McCarthy's story proposes a new posthuman alternative to reconfigure and reallocate gender-specific social roles. A predefined social role may be subject to an end number of human limitations. The question is whether the emerging potential of a posthuman entity could suggest new forms of sociality to resolve those issues. The story portends to the potential use of household robots in hitherto predefined conventional social roles. It suggests how a gender-neutral nursemaid robot can be beneficial to those women who are engaged in hazardous and life-risking activities. In their absence, a robot nursemaid can take care of their children or help these children growing with language acquisition in the absence of human mothers. The story indicates the child's fulfilling experience, as acquired while passing through the Lacanian psychoanalytic stages of human development. The narrator's description, "The baby had been neglected since birth by its alcoholic, drug-addicted mother and had almost no vocabulary. It winced whenever the robot spoke to it…" (McCarthy 345), works as a shred of evidence, although speculated through a posthuman frame, that the robot nursemaid, expressing itself as a simulated mother of the child Travis, can be helpful in the linguistic development of children.

The robot's honest effort to help Travis grow physically, psychologically and linguistically not only deconstructs the mother-child relationship in the posthumanist society but also entails a comparative framework drawing an analogy between human and robot mothers, representing biological vis-a-vis artificial mothers. The biological mother's horrific and brutal statement, "Get the hell out! And take the fucking baby with you" (McCarthy 349), stands strongly opposite to the robot's protective and defensive reply, "I'll keep doing what keeps him alive" (348). This comparison re-examines the predetermined notion of mothering, pointing out that raising a child in a healthy and well-

organized manner is more important than giving birth. These divergent worldviews, as portrayed through two contrasting mother figures, support the idea that mothering is a caring attitude that should be nurtured throughout the life cycle rather than a forced choice. The essential quality expected in mothers is the innate love for the child and a desire to give proper guidance. The robot, trying to simulate loving the baby, has established that motherly love. Robot's act of taking the baby away is one type of concern for the baby's health, "otherwise, the baby will die" (McCarthy 352). It even wears a dress that covers its limb, which it thinks "could make to overcome the repulsion robots are designed to excite in human babies and children" (352). The robot's robust and determined attitude not to "let anyone else [except the biological mother] touch the baby" (352) points out its strict adherence to the ethical principles that strictly prohibit any stranger to come in contact with the baby and at the same time, its defensive and argumentative conversation with the officers may enhance a posthuman proposal for the envisioned substitution of a social role that, as Krieger argues, "machines are argued to be better than humans in terms of speed and power, routine work, computation, short-term storage, and simultaneous activities" (11). It instigates one to think that a robot is not only "an artificially created system designed, built, and implemented to perform tasks or services for people" (Wilson), but also "a machine that senses, thinks and acts" (Bekey 138). The ethical codes implanted inside their programming unit work as a continuous reminder of the laws, dictated by Isaac Asimov, which they have to maintain throughout their lifespan: "1) A robot may not injure a human being, or, through inaction, allow a human being to come to harm. 2) A robot must obey orders given it by human beings, except where such orders would conflict with the First Law. 3) A robot must protect its own existence as long as such protection does not conflict with the First or Second Law" (Asimov 218). The household robot's ethicality while answering to the Child Welfare Committee "Ma'am. I can't answer that. Robots are programmed not to comment on human motives" (McCarthy 350) diminishes the much-anticipated unintentional uncertainties of losing human privacy in techno-human cohabitation and re-establishes the logical ground, as pointed out by Mr. Weston: "A robot is infinitely more to be trusted…His entire "mentality" has been created for the purpose. He just can't help being faithful and loving and kind. …" (Asimov 12). They are, Hancock thinks, "designed to accomplish a specific set of largely deterministic steps… in order to achieve one of an envisaged and limited set of pre-defined outcomes" (284). They are very understandable and careful about their vocabulary and its impact on both women and children. The robot's stern reply to Officer Oakes' request to play the recordings of its mistress' order, "No, ma'am. It contains bad language. I can't play it unless you can assure me there are no children or ladies present" (McCarthy 351), though mirrors the pre-programmed and well-installed human code of conduct observed by the intelligent machine, reflects robotic sincerity and self-autonomy, which help it to "sense its environment, plan based on that environment, and act upon that environment with the intent of reaching some task-specific goal (either given to or created by the robot) without external control" (Beer et al. 77). This "task-specific goal" allows the household robot not to share what is a verbal abuse by the mistress. Actually, it is the working of the autonomous systems that are "generative and learn, evolve and permanently change their [robots'] functional capacities as a result of the input of operational and contextual information. Their actions necessarily become more indeterminate across time" (Hancock 284), having some restrictions that help them to behave politely, speak modestly, and argue

logically, which, in a way, make them claim "complementary superiority" (Krieger 11).

Deconstructing the Idea of Mothering in the Posthumanist Society: Evaluating Social Changes

Posthumanism tries to introduce a modified world where each and every earthly existence being live in harmony with the other, hoping to make the structural base of the society on the enlarged idea of 'personhood' which can give equal value and honor to all. As we experience in the previous points that artificial entities are engaged in various domestic social roles like a friend, caretaker and nursemaid, we can conclude from those examples that posthumanism is redefining diversified social roles through the artificially intelligent entities. In this point, the readers can view a new area of implementing artificial intelligence, in the role of mothers, which is considered as the most complicated attempt to alternate through new agencies. As Dillard believes, "A young child knows Mother as a smelled skin, a halo of light, a strength in the arms, a voice that trembles with feeling. Later the child wakes and discovers this mother – and adds facts to impressions, and historical understanding to facts" (Dillard 39). This is a preconceived notion of a mother, who is understood to embody love, affection, emotionality, and the well-being of her children. However, in a posthumanist scenario, the bond between mother and child is reconfigured through a number of alternative schemes of variations that cross-examine the predefined role of a human mother. Many scientists, due to the artificial agencies' adaptive power of human nature and culture, find it beneficial to use these motherly entities in manifold emerging fields and in numerous emergencies like epidemics, pandemics, and hazardous situations. As their bodies are resistant to disease and infection, it appears a boon to the corporate sections to use them in handling a number of disasterous situations. Carole Stiver's *The Mother Code* represent that emergency situation where a deadly virus named IC-NAN tries to destroy the whole generation, not even sparing the babies. To rescue the future progeny, the scientist develop a dozen motherly robots which can withstand the deadly situation as well as they are capable of incubating, raising, and socializing the children. From one of their discussions regarding the implementation of the motherly robots, the scientists make it clear how they will try to make the mothers appropriate in their duties towards the children, "…we can teach our bots to rear their children as their real mothers might have… We can give her [the bot] the ability to teach, to protect" (Stivers 84). Although the readers may have the doubts regarding the successful implementation of this highly sensitive project, yet they must consider the present situation in which the biological mothers die massively due to this life-threatening virus. The scientists are left with a few options to save the next generation of children. The issue of survival is central here with robots serving both as defenders and caregivers of the children. This artificial genesis of motherhood offers numerous fresh viewpoints on parenting, including the nature of motherhood, the mother robot's bond with the child, the role of technology in improving human lives, and the potential for artificial intelligence to love and care for people. It challenges the traditional assumption that a mother must be a flesh and blood person with human characteristics, allowing humans to think differently: a mother can be biological or artificial; what matters are the mother's love, emotion, affection, and care for her kid. Mother robots are designed not only to live and meet basic needs of the children but also to nurture and form relationships with the artificial mothers and create artificial emotion "[to] facilitate believable human-robot interaction…[to] provide feedback to the user, such as indicating the robot's internal state, goals, and (to some

extent) intentions…[and to] act as a control mechanism, driving behavior and reflecting how the robot is affected by, and adapts to, different factors over time (Fong et al. 151). This attempt may raise the question of whether unconditional affection and empathy are inherently human qualities or whether they can be intentionally generated in a way that is both real and meaningful. This artificial parenting is especially crucial in today's society, when technology is increasingly being utilized to address gaps in care. When biological mothers are unavailable due to death, illness, or other reasons, artificial alternatives such as robots or sophisticated AI are being studied as potential replacements. Regardless of the mother's physical characteristics, this evolution challenges our cherished beliefs about motherhood by raising the question of whether the bond between a mother and her kid is solely the product of physical attachment or something that lies beyond that.

These creative artificial mothers have been involved in a number of tasks that are often carried out by human mothers, such as teaching their children, caring for them, and counseling them on moral obligations. They are constantly aware of their children's physical well-being. Such as, Rosie timely reminds Kai of his mealtime regimen. According to her, a child's health and energy levels increase with the amount of timely and nourishing food they consume. Here, she comes across as a concerned mother who genuinely cares for her child's welfare. She exhibits the affectionate traits of a human mother despite her non-human background, especially in maintaining a structured and healthy schedule for her child, Kai. Since she stresses the significance of a well-balanced diet for Kai's growth and energy levels, her constant reminders about meal times show her dedication to his physical well-being. Conversely, Kai's obedient response to her care shows that he trusts her and relies on her counsel. This illustrates their relationship's intimacy as well as her mechanical nature because Rosie's maternal instincts, despite being programmed, have a truly human feel. In addition to being his nurse and assistance, she is also a guardian of his growth and well-being, keeping an eye on every aspect of his life.

In this way, the mothers have been monitoring the kids and controlling their every action. They teach kids to value and appreciate all non/living organisms and objects in the cosmos. As reflected in Rosie instruction to Kai:

He had names for all of them—the Red Horse, the Man with a Big Nose, the Gorilla, and the Father, who balanced his plump, round rock baby forever on his giant knees. Rosie had taught him about how humans used to live. She was his Mother. He supposed, then, that the rocks were his family —the guardians who, along with Rosie, had kept watch over him since the day of his birth. (Stivers 31-32)

Posthumanist philosophy, which consistently emphasizes respect for all earthly components, is exemplified by Rosie's teaching Kai to accept mountains and other living and non-living objects as members of his family. Rosie uses her sophisticated cognitive skills to teach about the value of morals, empathy, and global connectivity. Together with inanimate natural elements like rocks, wind, and water, she educates Kai to understand and value all living and nonliving things, including people, animals, and plants. The children learn from these lessons that all things in the universe, sentient or not, have worth and should be honored for their contribution to human education. According to Rosie, all living things, whether they are machines or humans, must rely on their environment and the natural world to survive. For a mother to teach her child to appreciate and value every existential being and element is just as important as a robot honoring nature and all-natural elements. Instead of adopting the anthropocentric and narrow-minded belief that

everything is beneath humans, Rosie here shows herself to be a modern mother with a pragmatic perspective with the responsibility to instill in Kai the value of respecting everyone and everything. In order to help her human child have a fresh perspective on the world, she teaches him to be a human with an updated sensibility. In addition to teaching Kai how to survive in a potentially harsh and nurturing environment, the ethics she wishes to instill in him are crucial at this early age because they will equip him with a strong sense of responsibility and an awareness of the delicate balance of life.

By doing this, these artificial mothers transcend the role of merely care providers and become mentors, teachers, philosophers, and Pole Star(s) who influence as well as shape how future generations perceive their role in the vast algorithm of existence. The multiple attempts they exhibit represent them as the agents who try to shape human knowledge and experience. This lead a few scholars to argue that every artifact may possess some degree of "agency" in the context in which it operates, meaning that it may have some control over what is done as well as how. This type of agency is not very contentious and is widely acknowledged by technological philosophers. The mode of transportation one chooses, such as walking, biking, or driving, influences how s/he travels and how s/he experiences it. One can act in different ways, perceive the environment differently, and so forth. However, not everyone is ready to acknowledge that technology has agency in terms of experience and knowledge as well. Knowledge and technology, as well as culture and materiality, are typically kept apart. But in Ihde's work namely *Technology and The Lifeworld: From Garden to Earth* (1990), for example, phenomenology of technology has highlighted the powerful form of agency: technology, in a Heideggerian sense, changes our experience, our "world." This implies that new experiences for both caregivers and care recipients will arise as a result of new care technologies. In epistemological and hermeneutical terms, technology is therefore significantly more "active" than those who believe it to be merely an instrument. However, considering robots as artificial actors in care implies a stronger sense of 'agency,' comparable to human agency. In this context, I am referring to autonomous machines that perform activities previously performed by humans and "work alongside people" (as opposed to industrial assembly lines). The comparison for transportation technology is a self-driving car that interacts with humans and other vehicles on the road. This type of treatment is called an "artificial agent." This discussion, therefore, explores machine agency and the ethics of artificial agents. If a robot possesses this type of "strong" agency, is or can it also be "moral"? If so, how could it be possible? Could it be (or become) conscious? What ethics would be necessary to govern artificial agents? These are critical general questions that researchers have been forming while discussing the fruitfulness of artificial care. Therefore, the concept of "artificial agency" presents challenges and diversification. There are many researchers who questions about measuring the robot and the agency. They argue what matters do we need for comprehending and assessing robots and various types of agency? Whether it is what the machine "objectively" or the robot "really is" or rather how it seems to us. According to Heideggerian phenomenology, we are unable to directly access reality; instead, our understanding of humans, technology, and other entities is always mediated. Something might appear to us in a variety of ways and manifest itself in many ways. Therefore, the perception of a robot's 'agency' varies depending on the situation, context, and practice (Coeckelbergh 271-73).

An Ethical Dilemma in Imagining Robots in Socio-Cultural Roles and Its Impact

International Encyclopedia of the Social & Behavioral Sciences defines moral dilemma as a few specific situations in which "an individual is faced with choosing between two different courses of action, each of which is morally obligatory, but cannot do both. These dilemmas often arise in the field of biotechnology, medicine, and human interaction with animals and the environment, due to the development of new technologies and scientific methods" ("Ethical Dilemma"). It occurs when a person finds it difficult to choose between two opposing principles. It has moral ramifications, emotional pain, conflicting principles, and the inability to find a simple answer. Because of advances in science and technology, these moral conundrums can occasionally be complicated and become an inevitable aspect of life. Because of this, despite the robots' strong determination and commitment towards their work, the humans, adhered to the conventional conception of 'humanhood,' find it hard to accept this fundamental paradigmatic shift in their purported belief system, particularly in employing artificial intelligences in the roles that they believe solely performed by them. Therefore, humans' innate stimulating response instinctively directs them to behave, sometimes offensively as well as oddly, even if these entities are chaste and loyal to humans; their attitude toward the machines varies when delegating conventional social responsibilities to them. Just as, in *The Mother Code*, Kendra reacts paranormally while she listens to the idea of human replacement by the robot mothers, "Still, it's uncanny … When I listen to one of these bots speak … If I close my eyes, it's difficult to believe she's just a machine" (Stivers 126). A deeper philosophical question is raised by the word "uncanny," which suggests that the robot's resemblance to a human mother evokes a feeling of dread and a subconscious awareness that something about the situation is profoundly unnatural, posing a philosophical question: Can a machine, no matter how lifelike, truly replicate the fundamental emotional and nurturing qualities of a human mother? Things are made even more difficult by the manufacturers' decision to exclude love from these gadgets: "But not love them… No … complex emotions like love … A code like this has yet to be written, and there's far too little time to write it now" (84). Love is usually considered to be an authentically human, natural emotion, but it also becomes a point of controversy when defining what a machine can and cannot replicate, reflecting a moral debate faced by humans in the face of advanced technologies. The need for technology to handle a crisis and the moral, psychological, and emotional ramifications of substituting robots for something as fundamental as human motherhood present an ethical conundrum. This scenario brings up challenging questions about the limits of technology. Will artificial intelligence ever be able to fully capture the range of human experience, especially the deep and elusive facets of connection, love, and caring? Would it be moral to use machines to mimic these traits even if they were possible? Given the long-term effects on human values, relationships, and emotional health, the question is not only what is technically possible, but also whether it should be pursued.

That is why, despite the robots' severe and determined commitment to their responsibilities, people experience a duality in welcoming them into their lives like any other identical creature. Though it is scientifically assumed that a robot mother can raise her children or robot nursemaid can take care of patients in almost the same way that a human mother can because they have artificial intelligence, senses, feelings, and emotions, humans are unsure about how to properly implement it because humans still adhere to the traditional idea of motherhood, in which it is normal for a human mother to raise her child rather than a robot. They are adamant

about recognizing the fundamental paradigmatic shift in their professed belief system, which is based on human compassion and love. When humans do not find that belief system and face something new, they feel certain strangeness in associating them with the newness. This discomfort is very common for humans since a "part of the discomfort in people's response to robots with very humanlike designs is that their behaviors are not yet fully humanlike, and we are extremely familiar with what humanlike behavior should look like" (Knight 7). This examines a fascinating and provocative conflict between the developments of artificial intelligence and strongly held human beliefs about motherhood, caregiving, society, and what it is to be "human."

Besides, the uneasiness with artificial creatures arises from their "otherness"—their mechanical, programmed nature as opposed to the organic, spontaneous, and unexpected aspects of human relationship. This uneasiness brings in human mind the idea of many probable changes in future; they think about the unwanted outcomes that have the potential to be emerged if the robots start to work autonomously. "Indeed, if AI continues to become more intelligent and, especially, more autonomous, safety will become an ever more pressing issue…" (LaGrandeur 99). This arouses humans' inborn fear of accepting anything unnatural like the artificial mothers, robot assistants and nursemaids. They believe that a subtle mistake on their part may result in a destructive outcome. A sergeant's advice in McCarthy's story, "Don't get close. It's a malfunctioning robot. It could break your neck in one swipe" (McCarthy 350), reflects that inherent fear humans may have been breeding inside against the mechanical entities. Many Hollywood movies like *Terminator* (1984), *Matrix* (1999), *Blade Runner* (1982), *Metropolis* (1927), *Avengers: Age of Ultron* (2015), *Transformers: Revenge of the Fallen* (2009), *Transformers: Age of Extinction* (2014), *RoboCop* (2014) and others divulge the same human fear through screen narratives of human v/s machine. Such a dystopian presentation not only stimulates the innate fear in the minds of the mechanic users but also refrain humans from using these machines. This works as a triggering point in Mrs. Weston's life, while disbelieving and fearing Robbie, "I won't have my daughter entrusted to a machine – and I don't care how clever it is. It has no soul, and no one knows what it may be thinking" (Asimov 12). Her most profound safety concern for her child is the result of the discomfort she feels about the artificial working of the machines, and therefore mirrors her anxiety. Therefore, though "Technological robotic care for children is a developing industry…," "For some people it is heartless or immoral to trust young children to a robot or to leave them in a day care centre that is supervised by machines" (Hosseini & Goher 171). And, it is also very tough for humans to believe, at the initial stage of techno-emerging trends, to think machines are "made to our society's standard of human perfection" (Cole 151). Humans, alternatively, can prefer animals "because human-pet relationship (as opposed to human-robot ones) is a more acceptable replacement…" (Teo 96). One of the reasons behind the preference of animals for machines is the robots' human-like appearance, which may, at a time, cause further problems in user interaction, as the users, after getting attached to these entities, may undergo psychological complications in handling their absence. Gloria's angry statement, "He was not no machine! Screamed Gloria, fiercely and ungrammatically. 'He was a person just like you and me and he was my friend. I want him back" (Asimov 16) expresses her psychological breakdown after her separation from Robbie. It is really a concern in the digitally advanced age that "a child might become too attached to a robot if it appeared human-like, causing distress when the robot is no longer present" (Teo 96).

Besides this psychological challenge, there may always be a tensioned narrative of "human-robot conflict [that] has arguably a popular device…in Western culture" to highlight "the 'elicitation of associated fears' of robots threatening the existence of humans" (Teo 96). This fear leads the designated authorities to reconsider providing childcare and mother roles to the robots because "irresponsible AIs can without a doubt spark, contribute or lead to numerous dystopian realities" (Klug 11).

However, Sio &Wynsberghe argues in their work that since all of this may seem to be a proposed representation of what many people would view robots caretakers as dangerous practices, should we draw the conclusion that the use of care robots should always be discouraged or prohibited if they detract from the skills learned or the core values of care that are established through the practice? (1752), because this unwanted fear can work as a hindrance on the way of advancement. It could be that the machines have some potential dreads, but that can be curable and managed through advanced technologies and scientific methods. It can undermine the robot's altruistic motive of helping humans, whether, as shown in the selected texts, it be saving the infant from its drunken mother by the nursemaid robot in order to safeguard its life and provide a healthy upbringing, or saving Gloria from the car accident or incubating, raising and protecting all the children by the robot mothers in the face of the dangerous virus. The neighbors' unwarranted fear, "That weird robot is kidnapping a baby! Call the police" (McCarthy 350), Officer Annie Oakes's offensive remark, "I think I can disable the robot" (350), and the manufacturer's decision: "I think it's time we try putting these Mothers to sleep" (Stivers 261) portray the result of the insidious terror as well it depicts that humans are not just as the destroyers of their own creations but also as the agents who can predetermine the fate of another being/entity against one's will. When humans had the need of the robots, they used them either as playmates or nursemaids or as mothers, and when that necessity is over, they try to dismantle, terminate and kill them, considering them irrelevant and dangerous. In "The Robot and the Baby," when the biological mother is neglecting the child due to her drunkenness, the robot nursemaid is employed to take care of the child like a mother, and when it tries to save the child by taking it to a new place where it can raise the child, the officers try to kill the robot thinking it is going to harm the baby. In *The Mother Code* also, the scientists engage a dozen of robot mothers to save their future generation. But, when the children reach to teen age, they decide to terminate the mothers. This utilitarian mindset of humans questions the ethics of humanity in the posthuman age. Negating robot mothers appears to undermine the role of all mothers in nurturing the earth. They treat 'motherhood' as if it were a product or service that could be consumed and discarded as necessary. This is also a defamation of the holiness of motherhood. This monetization of motherhood may regard both mothers and children as commodities or things with purely economic value. It highlights the consumerist mindset of those who employ women to meet consumerist requirements such as childbirth, upbringing, and caring for children. It is nothing more than a profit-driven strategy that destabilizes robot mothers, depriving them of parental rights over their children. Some researchers also argue that the capitalist society view the Robot women as baby factories designed to incubate infants. This also lends support to the concept of commercial surrogacy, which has the potential to degrade the concept of ideal mother figures by depicting women as consumers rather than mothers. If this thought continues to persist, then the robot mothers' interactions with the children may not be interpreted as a sincere effort to save humanity. Instead, it could be interpreted as a

consumerist project, "re-instating the acceptability of incorporating consumer goods and services into their mothering" (Clarke 270). Furthermore, in *The Mother Code*, under the guise of protecting the children from their mothers' unpredictable behavior, the makers tacitly advise the youngsters to commit the horrible act of matricide by suggesting that they infect their mothers with unknown viruses and compel them to stop. Humans in the digitally enhanced age have purposefully committed terrible offenses such as mother-killing. The children, who have been indoctrinated to see the robots as their mothers, are caught in an ethical quandary in which they are pressured into dissolving emotional bonds with their mothers. The deaths of these mothers result not only in the robots' deaths, but also in the loss of their biological mothers' identities that are incorporated inside the robot mothers through the chips they have been carrying. As a result, in this consumerist, materialist culture, the interaction between humans and machines is arbitrary and unstable. This is particularly ironic because posthumanism preaches equality, fairness, and honor for all beings and entities, but it now presents a future in which humans desire to eliminate other beings and entities just because of unanticipated complications. This scenario demonstrates the potential downside or dark side of posthumanism: while it advocates for a world with fluid borders between humans, machines, and other creatures, it may also result in the loss of deep human-nonhuman relationships that give life meaning. When everything is susceptible to utilitarian reasoning, in which an entity's value is determined entirely by its utility, connections lose their sacredness and become transactions.

III. CONCLUSION

A probing of the select texts presents contrasting graphic scenarios of the digitally advanced age. It represents a dichotomic human approach with regard to intelligent machines in new social roles. In "Robbie," Mrs. Weston is very cautious about her daughter's safety in an amalgamated space as her daughter always engages herself with the artificially advanced automated robot, which can, at any time due to malfunction, attack her, causing physical and psychological damage. Her strict stand to separate her daughter from Robbie is a move taken by a worried mother who is always chased by unwanted negative thoughts about the machines. In "The Robot and the Baby," the human mother seems less concerned about the baby and her own role as a mother. To her, maternity is a forceful implementation upon a gendered body, ruining her freedom and enjoyment as an individual. She is neither concerned about the child nor does she presume the robot may attack the baby. Her angry remark, "Get the hell out! And take the fucking baby with you," breaks all the preconceived notions of motherly love and care, forcing the readers to reexamine the conventional idea of motherhood. Her social image as a mother is subject to her human frailty and free will. Unlike her, the household robot, as a well-programmed motherly figure, embodies motherly love and necessary emotions, performing an effective social role. It is always careful about the safety of the baby's health and his language acquisition progress. Its belligerent mood to fight with anyone who will take the baby away envisions a new definition of AI-generated motherhood that does not apply to humans. This idea is also reflected in *The Mother Code*, in which Carole Stivers depicts a future in which robot women incubate and raise children in a pandemic-stricken city while maintaining strong relationships with their children. They educate children how to be human, how to react in state of crisis, and how to appreciate all earthly organisms that play an indirect or direct role in the flourishing of nature. At the same time, it highlights humans' reluctance to accept robots in sensitive roles such as mothers, implying a profound moral

debate about the role of technology in human lives. It argues whether machines, despite appearing humanlike, can elicit true human qualities such as emotion, love, affection, and kindness like any human, or if they are simply a fictional replication in human roles with no reality at all. Due to this fixity of thoughts, modern society faces the dilemma of acceptance or rejection with regard to intelligent machines; people are constantly haunted by the dystopian representation of tech-human reality, which works as a reminder while embracing the progression of evolutionary science and technology. However, artificial insemination of human feelings that the texts try to graphically portray establishes the idea that in future, human affection can be represented through any bodies, be it a human or any other non-human organism. It may represent a world where biological and physical differences may no longer matter but the fundamentals of relationships and emotional bonds endure. Even while the "mothers" and "caretakers" might not be biological, they might nevertheless offer the protection, nurturing, and care that characterize the role of a mother. In keeping with the themes of adaptability and resiliency, the children may, initially find it difficult to accept these new types of mothers, eventually come to love and accept them in spite of their physical differences. This futuristic perspective portrays the changing nature of family and identity in a posthuman setting where relationships are formed through shared experiences and emotional ties, surpassing conventional ideas of biology and physicality. This could result in the creation of "A new generation. A new world" where "There are no enemies…" (Stivers 336).

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