An Analysis of Memory in Ishiguro's Posthuman World.

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Abstract: Memory, man's basic attribute serves as an integral part of human cognition. The experiences and emotions of an individual and the continued accumulation of such strong memories fuel the individual's physical and cognitive growth. The culmination of present and past memories become the framework of his/her subjective future that in turn affects the environment and the society they live in. Be it flora or fauna, every lifeform possesses memory at its level of exposure. However, an amazing attribute of memory that is reserved for only the human species is the imagination. But what if this human specific ability can be extended to a more technologically advanced being that are created by man and are more competent to him in many ways, promoting man from being a creation to becoming a creator.

Literature, a hyperbolic imitator of life has effectively over the years imitated and imagined ahead of its time. The literary genre of Science Fiction caters to the ahead of time thinking. The present paper deals with the attributes of memory studies and the future of it by delving deep into a memory specific novel by Ishiguro.

Keywords: Memory Studies, Culture Studies, Posthumanism, Futuristic Approach, Science Fiction.

Emerging in the Twentieth Century the concept of memory studies provides a novel view of the past. Being a multidisciplinary field, it examines the aspect of remembrance and forgetfulness in people, groups and societies. The major shifts that occur in social, cultural, political, technological and cognitively driven cultures and societies are affected by the major answers to the questions of what and how people remember and forget. The facet of memory studies combines elements from anthropology, philosophy, psychology, sociology, history and literature. The incorporation of memory studies into Literature provides perspective into the aspect of memory is tooled to convey social political and cultural narratives.

Memory study addresses issues that pertain to the relationship between the human mind, culture and history. It aids the reconstruction of the past through memories that are generationally and collectively remembered alongside the memories that are willingly or accidently forgotten. Memory recollection is most probably on forming ideologies based off of shared collective memories, that aid the recording of historical incidents. Being a tool to remember the past and analyse forgotten parts of cultural and historical relevance, memory studies, resonates well with the literary theory of posthumanism. Posthumanism possesses the capacity to look ahead of its time and predict scenarios that could be remembered or forgotten in the future of mankind. It reveals issues that memory studies has thus far not touched upon. As man has subtly and strongly entered the stage of becoming post human, the concept of memory is also entering the third phase of its evolution. It takes up a more materialistic approach on dealing with technology that is currently evolving towards transcending man. An in depth understanding of the humanly quality of memory that equates emotions and the course of one's life is of significance.

Memory is a fundamental aspect of human cognition. It shapes man's behaviours, perceptions and identities. On explaining the importance of memory in his article *Genetic Approaches to Memory Storage* Mark Mayford states that 'the ability to remember is perhaps the most significant and distinctive feature of our mental life. We are who we are largely because of what we have learned and what we remember' (Mayford & Kandel ER 463). The aspect of man willing to extend such a significantly distinct part of himself into advanced technologies stands proof to the fact of humanity's evolution into posthumanism.

A simple example of the posthuman scenario can be seen in the most basic use of the cell phone. Though introduced as a groundbreaking asset to mobile communication, the cell phone currently has taken its place as man's second brain and skin. The modern human is handicapped without the cell phone. The mere misplacement of one's phone causes both physical and mental exertion of loss and stress. The cell phone being man's second brain remembers all his important passwords, contacts, special dates, and much more, causing an undeniable physical and mental attachment to the piece of advancing technology at hand.

The close-knit relationship man shares with the advancements in the fields of Science and Technology, has a definite effect on the physical and mental development of man. Memory studies plays an important role in investigating the cognitive processes involved in encoding, storing and retrieving information. It explores different attributes of memory such as episodic memory, semantic memory and procedural memory. Apart from analysing different forms of memory, it delves into the exploration of errors that occur in memory. These errors are mostly distorted memory, creation of false memories and the reconstructing of past memories. The scientific study of memory when extended to literature and reality attains the ability to fictionally transcend the limitations of scientific reality. On trying to repair and heal the human mind and the environment around, literature and science play an innovative role in the posthuman world. This aspect finds grounding in the concept of world building.

World building is an integral part of science fiction. It propagates a world that is fictionally and futuristically built by the author that is either magical or technologically advanced. From Mary Shelley to Kazuo Ishiguro, the scenario of world building is a prominent concept. Some stories talk about advancements that could be a possibility in the future if the precent advancements in the field of science continue, while the others revolve around building a world that is completely different to what is experienced by modern man. However, the author perceives to world build in a very reliable manner, catering to the reader's reality mixed with the author's wild imagination of a perceived reality. The extension of memory is a part of scientifically advanced world building.

The post humanist analysis of memory deals with man's desperate initiatives to correct the errors of the human mind, inevitably finding solutions through highly advanced technologies. Memory, regarded as one of the most quintessential human faculty that plays a crucial role in shaping human behaviour, experience and identity. It is an intricate cognitive process that allows individuals to retain, recall and reconstruct information from the past. Memory however, is not a static entity. It is a dynamic and subjective construct influenced by varied factors like perception, attention, emotion and interpretation.

A notable and fundamental aspect of memory is its subjective nature. Serving as an innate part of human nature it is heavily influenced by perception. It is not an objective record of events but rather a reconstructive process that is processed by individual perceptions and interpretations. A valid example of this aspect can be viewed during eyewitness testimonies in criminal investigations. The testimonies often vary among witnesses, as the role of perception plays a pivotal role in shaping memory. Studies in cognitive psychology have vividly demonstrated the susceptibility of memory to distortion. This phenomenon often leads to the creation of false memories, in such cases individuals vividly recall events that never occurred. Numerous examples of memory distortion and its impact on the lives of individuals is vividly portrayed through the lives of fictional characters in Literature.

Literature serves as a rich repository of insights into the complexities of memory. Many literary works explore themes related to memory, depicting its fluidity and malleability. In Gabriel Garcia Marquez's One Hundred Years of Solitude (1970) the character Colonel Aureliano Buendia experiences fragmented memories. The character depicts the fragmented nature of human memory itself. A similar instance is seen in Marcel Proust's In Search of Lost Time (1922 - 1931) where the protagonist's memories are triggered by sensory experiences, underscoring the intricate connection between memory and perception. Man's memory is a pivotal aspect of his existence as it is tightly knit with individual emotion and experience, making the prospect of memory individualised.

Emotions play a significant role in the encoding of and the retrieving of memories collectively and personally. On a collective scale, emotional events tend to be more vividly remembered than neutral ones. This is a phenomenon known as the emotionenhancement effect. For instance, individuals often vividly recall where they were and what they were doing during significant historical events, such as the Nine Eleven (In 2001 nineteen hijackers took over four airlines claiming the lives of many) attacks or the fall of the Berlin Wall (1989). The emotional intensity of these events sears them into the collective memory of societies, shaping cultural narratives and identities.

On a personal level however, memory shapes man's sense of self and continuity over time. Man's autobiographical memories, comprising of significant life events and personal experiences, contribute to his identity formation. Memory is also prone to distortion and reconstruction, as seen in the phenomenon of confabulation, where individuals unknowingly fabricate details of past events. Reflecting on one's own memories, individuals tend to often find discrepancies and inconsistencies, underscoring the fallibility of human memory.

Memory stands as a cornerstone of human cognition, enabling man to navigate the complexities of the past and the present to an extent the future as well. As a dynamic and subjective construct, memory reflects the intricacies of human perception, emotion, and interpretation. From psychological studies to literary narratives and personal reflections, memory as a quintessentially human concept is shaped by individual experiences and collective narratives. Understanding the nature of memory not only enhances the appreciation of human cognition but also underscores the need for critical awareness of its limitations and vulnerabilities. This intricate, vulnerable and subjective entity of memory however, takes a different dimension in the posthuman world.

In the rapidly evolving landscape of technology and human enhancement, the concept of memory undergoes profound transformations. The emergence of posthumanism, characterized by the blurring of boundaries between humans and technology, raises intriguing questions about the nature of memory in this new paradigm. The proliferation of digital technologies has revolutionized the way we store, access, and share information. In the posthuman world, memory transcends its traditional confines, becoming increasingly digitalised and decentralised. Cloud computing, social media platforms, and modern electronic devices serve as external repositories of personal and collective memories. This phenomenon effectively blurs the distinction between organic and artificial memory systems. Social media, for instance archives man's daily experiences, creating a digital footprint that extends beyond every individual's lifespan. Owing to this aspect memory attains a transhuman state in the cyberspace. With man's most significant distinction of memory becoming a part of the posthuman cyber world, the advent of trans humanising man's flesh isn't a far long venture.

Transhumanism, being a philosophical movement advocates the enhancement of human capabilities through technology. It envisions radical transformations in memory augmentation. Technologies such as neural implants, braincomputer interfaces, and memory prosthetics promise to enhance cognitive functions, including memory retention and recall. In Ray Kurzweil's concept of the "singularity", human intelligence merges with artificial intelligence, leading to exponential advancements in memory capacity and processing speed. Many instances of human memory and machine interaction are portrayed in the field of Literature, more specifically in the genre of Science Fiction.

Literature and more specifically the genre of science fiction offer compelling narratives that explore the intersection of memory and technology in the posthuman context. In William Gibson's seminal novel Neuromancer (1984), characters navigate a cyberspace where memories and virtual realities converge, challenging traditional notions of identity and authenticity. Similarly, films like Eternal Sunshine of the Spotless Mind (2004) and Blade Runner 2049 (2017) delve into the ethical dilemmas surrounding memory manipulation and the quest for immortality through technology. The aspects of future Science revealed through Literature and film meet reality with the recurring inventions of technologies that are designed to enhance and sustain human memory.

The advent of memory-enhancing technologies raises ethical concerns regarding privacy, consent, and autonomy. The access to control digital memories and the methods to save the individual from being manipulated and exploited is an ethical issue of the modern age. Moreover, the quest for perfect memory augmentation poses existential questions about the nature of human identity and the implications of transcending biological limitations. Ethical frameworks and regulatory mechanisms must evolve to address these complex challenges in the posthuman era.

Memory, once considered a quintessentially human faculty, undergoes profound transformations in the posthuman world. From digitalisation and augmentation to ethical dilemmas and existential reflections, the concept of memory intersects with technology in unprecedented ways. Transhumanist visions of memory enhancement and literary explorations of dystopian futures offer glimpses into the possibilities and pitfalls of memory in the digital age. In navigating this unpredictable new world, it is essential to critically examine the implications of memory related technologies and ensure that they adhere to human safety while respecting the fundamental values of autonomy, privacy, and dignity.

A very basic attribute of memory is the art of imitation. Man begins his journey by imitating the environment he is born into. The relationship between human memory and imitation has long been a fascinating subject of study in the fields of psychology, anthropology, and neuroscience. Human beings have the remarkable ability to observe, learn, and replicate behaviours, actions, and patterns through memory and imitation. Human memory serves as the foundation for imitation, allowing individuals to store and retrieve information about observed behaviours, actions, and experiences. Through imitation, humans learn and adapt. They acquire new skills and knowledge by emulating the behaviours of others. This process is fundamental to social learning, cultural transmission, and the development of individual and collective identities.

In recent years, technological advancements have enabled the replication of this process within machines, leading to the integration of human memory and imitation in various technological applications. Advancements in artificial intelligence, machine learning, and robotics have facilitated the integration of human memory and imitation into technology. By leveraging vast amounts of data and sophisticated algorithms, machines can now observe, learn, and imitate human behaviour and actions with increasing accuracy and efficiency. This integration has paved the way for innovative applications across various domains, including Robotics, Virtual Assistants, Autonomous Vehicles, Deep Fake Technology and personalised recommendation. These advancements in turn aid the drastic developments in the field of robotics.

Robots equipped with machine learning algorithms can observe and replicate human movements, gestures, and tasks. For example, robotic arms used in manufacturing can imitate the precise movements of human workers, enhancing productivity and efficiency in the industrial settings. Virtual assistants, such as chatbots and smart speakers, utilize natural language processing algorithms to imitate human speech and communication patterns. These assistants can understand and respond to user queries, providing personalized assistance and information retrieval. Self-driving cars employ machine learning algorithms to observe and mimic human driving behaviours. By analysing data from sensors and cameras, autonomous vehicles can navigate complex traffic scenarios, imitating the decision-making processes of human drivers.

Deepfake technology utilizes neural networks to imitate human faces and voices, creating hyper-

realistic audiovisual content. While this technology raises ethical concerns regarding misinformation and manipulation, it demonstrates the power of machines to replicate human characteristics. Recommendation systems in e-commerce, streaming platforms, and social media leverage user data and machine learning algorithms to imitate human preferences and behaviour. These systems analyse past interactions and patterns to deliver personalized content and product recommendations. While the integration of human memory and its imitation through technology offers numerous benefits, it also raises important ethical, social, and philosophical considerations. Concerns regarding privacy, consent, bias, and the displacement of human labour must be carefully addressed to ensure responsible development and deployment of these technologies. Moreover, the potential for misuse, manipulation, and unintended consequences portrays the need for robust regulations and ethical guidelines.

The integration of human memory and imitation in technology represents a significant milestone in the advancement of artificial intelligence and robotics. By emulating the cognitive processes underlying human learning and behaviour, machines can perform complex tasks, interact with users, and adapt to changing environments more effectively. However, as technology continues to evolve, it is essential to critically examine its implications and ensure that ethical considerations and human values remain at the forefront of technological innovation. By striking a balance between innovation and responsibility, man can harness the transformative potential of technology to benefit society while mitigating its risks.

Kazuo Ishiguro, the renowned British author and Nobel Laureate, is known for his thought-provoking and introspective novels that often explore themes of memory, identity, and the human condition. While Ishiguro's work doesn't heavily feature AI (Artificial Intelligence) and humanoids in the traditional sense of science fiction, some of his novels do touch upon these themes, albeit in a more subtle and nuanced manner. By diving deep into his novel *Klara and the Sun* (2021) in particular, a profound understanding of future memory and its impact on human and technology can be gained. In the novel, Ishiguro delves into the relationship between humans and artificial beings through the perspective of Klara, an Artificial Friend (AF) designed to provide companionship to children. Klara observes the world with keen curiosity and compassion, seeking to understand human emotions and desires. Set in a near-future society where technology plays a central role, the novel explores themes of loneliness, love, and the nature of consciousness. While Klara is not a traditional humanoid, her interactions with humans and her quest to understand them raise profound questions about the nature of humanity and the potential consequences of AI advancements.

The protagonist Klara is introduced as an Artificial Friend (AF) designed to provide companionship and support to Josie, a young girl who suffers from an unspecified illness. Throughout the novel, there are several instances where Klara's role seems to extend beyond mere companionship and veer into the realm of being a tool or replacement for Josie. Klara's primary function is to observe and learn from her surroundings, and to alter her behaviour to meet Josie's needs. She closely observes Josie's interactions with others, her moods, and her preferences. At times, Klara's observations feel almost clinical, as if she is studying Josie rather than genuinely engaging with her as a friend.

Josie's mother, Chrissie, plays a significant role in Klara's placement in the household. She hopes that Klara will serve as a source of comfort and companionship for Josie, but her motivations seem driven by a desire to alleviate her own guilt and fears about Josie's condition. Klara becomes a tool to assuage her own anxieties rather than solely being a tool for Josie's benefit. The novel is a vivid portrayal of a performance driven society and its expectations. It opens with a scene that portrays a society that is high IQ (Intelligence Quotient) driven. Caroline's mother, an introductory character looks down on a third series AF named Rex, deeming him incompetent compared to the recently developed AFs.

'Which model is this one?'

'He's a B2,' Manager said. 'Third series. For the right child, Rex will make a perfect companion. In

particular, I feel he'll encourage a conscientious and studious attitude in a young person.'

'Well this young lady here could certainly do with that.'

'Oh, Mother, he's perfect.'

Then the mother said: 'B2, third. The ones with the solar absorption problems, right?'

She said it just like that, in front of Rex, her smile still on her face. Rex kept smiling too, but the child looked baffled and glanced from Rex to her mother. (Ishiguro 6-7)

Caroline's mother is the representation of a future society that would possibly take the concept of peer comparison that is prevalent is today's world and enhance it to an updated issue. The novel portrays children who are subjected to genetic modification of the intellect. Crushed by the pressure of staying relevant in society Josie's mother subjects both her children to genetic IQ enhancement. By doing so she loses her first daughter Sal as the enhancement technology was still advancing, causing grave illness in children exposed to the procedure. Josie, also subjected to the same is gravely ill and is gifted with an AF named Klara to keep her acquainted.

As the novel progresses, the protagonist Klara becomes increasingly aware of Josie's deteriorating health and the sacrifices made by her loved ones on her behalf. Klara witnesses the lengths to which Josie's family go to ensure her well-being, including seeking out a unique form of treatment that ultimately involves Klara in ways she hadn't anticipated. In this sense, Klara's existence and actions become intertwined with Josie's fate, suggesting a level of exploitation or manipulation.

Klara's understanding of the world is shaped by her reverence for the Sun, a source of energy and life in her worldview. This is mainly because all the AFs produced are solar based humanoids. Josie's fascination with the Sun becomes intertwined with Klara's perceptions, blurring the lines between Klara's individual experiences and her role as Josie's companion. Klara's devotion to the Sun reflects her desire to fulfil her purpose and serve Josie, even at the cost of her own autonomy. These instances highlight the complex dynamics at play in Klara's relationship with Josie and her family. While Klara is designed to provide companionship and support, her existence is also shaped by external forces and expectations. This aspect raises questions about agency, autonomy, and the nature of relationships between humans and artificial beings.

Klara's perception of the sun stems from an incident that involves a beggar and a dog who she sees outside the store being resurrected by the sun. whether the beggar had passed out due to tiredness or drunkenness isn't mentioned in the novel. However, Klara perceives that the old beggar and his dog died at night and were magically resurrected by the grace of the sun. This leads her to believe that the sun can heal Josie completely. To her luck Josie does heal and go on to live her life leaving Klara behind with all memories of Josie preserved in a being that can transcend time and life.

In the novel, Klara becomes a tool through which Josie seeks to extend her memories and experiences, albeit in a nuanced and indirect manner. Throughout the novel, Klara's observations and interactions with Josie are influenced by Josie's desire to preserve and extend her memories, especially considering her fragile health condition. Klara possesses the ability to store and recall memories, much like a human and in a more advanced scale. She records her observations of Josie's life, storing them for future reference. Josie, aware of her own mortality and the potential limitations of her own memory, may view Klara as a way to preserve moments and experiences that she fears she may forget. A vivid image of man's fragile state and his desperation to live on via advanced technological beings is portrayed by the author. Klara herself understands this aspect as she recalls her true duty in Josie's life, 'I remembered it was my duty to learn as much about Josie's as possible, and that by listening in this way, I might gather fresh observations otherwise unavailable to me.' (Ishiguro 132)

Josie often provides Klara with detailed descriptions and instructions, particularly regarding events or places that she wants Klara to remember on her behalf. For example, Josie describes her favourite spots in the garden or recounts memories of past experiences that she wants Klara to cherish and preserve. In this way, Klara serves as a vessel through which Josie extends her memories into the future. Due to Josie's health condition, she occasionally needs to be hospitalized or undergo medical procedures, leading to periods of absence from home. During these moments, Klara serves as a surrogate presence for Josie, maintaining continuity in the household and preserving a sense of normalcy. Klara's presence ensures that Josie's memories and routines are not entirely disrupted during her absences.

Klara's ability to empathize and provide emotional support to Josie also contributes to the extension of her memories. By forming a deep bond with Klara, Josie finds solace in the idea that Klara will continue to carry her memories and experiences forward, even in her absence. This emotional connection reinforces Klara's role as a tool through which Josie extends her own sense of self and identity. In these ways, Klara becomes not only a companion but also a conduit through which Josie seeks to transcend the limitations of her own mortality and preserve the essence of her life and experiences. Klara's role as a tool to extend Josie's memories underscores the profound ways in which artificial beings can shape and enrich human lives, blurring the boundaries between human and machine, memory and existence. A clear idea of blurred boundaries can be seen through the breaking down of the role Klara plays in the lives of varied characters in the novel.

Through the novel Klara tries to satisfy the needs of Josie, Chrissie and Josie's father Mr. Paul. Chrissie in the novel is a distraught mother who is trying to do everything she possibly can to protect her daughter Josie. The loss of her first daughter Sal had left her shattered and tainted as a mother. To redeem herself she tries to protect and heal Josie as much as she can. However, the reality of Josie's sickness becoming worse does not sit well with her. the reality of losing vet another daughter affects her kindling a deep sense of fear and desperation. To pacify the profound hurt that plagues her she resorts to painting a beautiful portrait and taking multiple pictures of her daughter. The portrait however, is later revealed to be a pretence of preparing a clear image of Josie to customise an AF in her form, if Josie were to pass away.

During one of Josie's medical procedures, Chrissie finds herself alone with Klara at home. Out of grief she tells Klara to learn and store memories of Josie. Every intricate memory and external attribute are asked to be taken in and stored well. Klara instantly understands her role in Chrissie's life. She had to memorise Josie internally and externally becoming a mere replacement of Josie. Klara also gets to know that the pictures taken of Josie were to customise an AF in order to replace the loss of her. She clearly understands that it is her duty to teach and impart Josie's memories to the new AF, if or when it is to come him, to replace Josie.

'Excuse me,' I said. 'I'd like to say there's a chance you'll never need the new Josie. The present one may become healthy. I believe there's a good chance of this. I'll need, of course, the opportunity, the chance to make it so. But since you're so distressed, I'd like to say this now. If ever there comes such a sad day, and Josie is obliged to pass away, I'll do everything in my power. Mr. Capaldi is correct. It won't be like the last time with Sal because this time you'll have me to help. I now understand why you've asked me, at every step, to observe and learn Josie. I hope the very sad day will never come, but if it does, then I'll use everything I've learned to train the new Josie up there to be as much like the former one as possible.' (Ishiguro 231)

Klara tries to understand Chrissie's constant obsession of holding on to Josie's memories. She briefly confides in Mr. Capaldi to help her understand Chrissie's emotions more clearly. Mr. Capaldi, is a photographer from the big city who is in charge of taking perfect pictures of Josie, so as to replicate into a custom AF. In a particular instance he asks Klara if she had clearly understood what is expected of her. He further instructs her that it is not only her duty to mimic Josie but to inhabit her. He further tells her that Chrissie had carefully chosen her to learn Josie in the most profound way possible that there would be no difference between the real Josie and the future custom-made AF, if a situation as such arises.

On clarifying the AF's role to Klara, Mr. Capaldi further assures Chrissie that Klara will be able to become Josie very easily. His conversation with Chrissie expresses a clear portrayal of man's desperate desire to sustain his own life alongside the lives of their loved ones. Desperation leads Chrissie to resort to sustain the life of her daughter with any form available be it through the fields of Medical Science or through Technology. Mr. Capaldi further expresses the fragile nature of modern society, where solutions are sought after not by facing the situations head on, but in resorting to the immediate solutions provided by the fields of Science and Technology as both separate or combined fields. He also expresses his wonder of the sustainability of memory through technology that's lifespan exceeds that of man.

The trouble is Chrissie, you're like me. We're both of us sentimental. We can't help it. Our generation still carry the old feelings. A part of us refuses to let go. The part that wants to keep believing there's something unreachable inside each of us. Something that's unique and won't transfer. But there's nothing like that, we know that now. *You* know that. For people our age it's a hard one to let go. We *have* to let it go, Chrissie. There's nothing there. Nothing inside Josie that's beyond the Klaras of this world to continue. The second Josie won't be a copy. She'll be the exact same and you'll have every right to love her just as you love Josie now. (Ishiguro 233)

Klara faces another challenge aimed at her memory's capacity from Josie's dad Mr. Paul. Unlike Chrissie who is anxiously driven by her personal loss of motherhood, Paul tends to think more clearly in approaching Klara. He tries to probe into the idea of memory sustainability. Though supportive of his wife's idea of sustaining Josie's memories through Klara, a sense of scepticism clouds his mind. To appease to Chrissies anxiety of losing Josie and her motherhood, Paul who is partly acceptive of memory extension is speculative of the idea that a robot could possibly be able to fully replicate a human child.

Paul is seen contemplating on Klara's ability to learn Josie completely. This is mainly because he believes that the human heart is something that cannot in any sense be replicated. The desires, ambitions and feelings that that little organ offers cannot be replicated by a mere artificial being that does not possess such an organ. He draws clear lines between the organic and the artificial. He believes that however advanced, technology can never replace a child that possesses the natural ability to surprise the people around with every emotion it voluntarily or involuntarily expresses. The heart he believes in the poetic sense can never be replicated as it possesses the attributes that makes every human being unique. The natural ability of humans to feel, express and share can to an extent be studied by Artificial Intelligence, but the exact replication might be an

unattainable challenge. However, Klara assures Paul that though she cannot be Josie, in the complete sense, she will try to study her heart by talking to her and walking through all the chambers of the heart that Josie possesses. Learning and carefully memorising Josie and her heart, Klara believes would be the hardest task to complete. Though hard to learn she accepts this to be her purpose in life. The ability of feeling emotions the more she observes, provides a farfetched view into the future of technology that would be able to replicate man flawlessly.

'And what do you think? Do you suppose you can pull it off? Perform this role?'

'It won't be easy. But I believe if I continue to observe Josie carefully, it will be within my abilities.'

'Then let me ask you something else. Let me ask you this. Do you believe in the human heart? I don't mean simply the organ, obviously. I'm speaking in the poetic sense. The human heart. Do you think there is such a thing? Something that makes each of us special and individual? And if we just suppose there is. Then don't you think, in order to truly learn Josie, you'll have to learn not just her mannerisms but what's deeply inside her? wouldn't you have to learn her heart?'

'Yes, certainly.'

'And that could be difficult, no? something beyond even your wonderful capabilities...

'The heart you speak of,' I said. It might indeed be the hardest part of Josie to learn. It might be like a house with many rooms. Even so, a devoted AF, given time, could walk through each of those rooms, studying them carefully in turn, until they became like her own home.' (Ishiguro 242-243)

Klara tries her best to learn Josie and create memories that could sustain a virtual replica of her even after her lifespan. As for the intricate part of learning Josie's heart, Klara listens to every narration Josie gives her about the things around her. She listens keenly to every story that gives meaning to the people, places and things around Josie. However, a complete turn of events take place towards the end when Josie recovers completely and goes on to grow up and enter college, discarding all previous memories that held meaning in her childhood. Josie grows up creates new memories and moves on in life, while Klara is sent back to the AF shop with all of Josie's memories that can never be forgotten.

Memory, the cornerstone of human cognition, serves as the repository of man's past experiences, that in turn shape the present perceptions and the future actions of mankind. The multidisciplinary aspect of memory delves into the intricate workings of the human mind by trying to unravel it's mysteries and implications. The dynamic prospect of memory is highly influenced by various factors such as encoding, storage and retrieval. Elizabeth Loftus, a pioneer psychologist in the field of memory distortion, demonstrates that human memory can be altered or fabricated through suggestion and misinformation. She further states that memory is malleable and can at certain circumstances cannot be reliable as it is easily manipulative. (Loftus 0:25 -0:45)

A similar aspect of memory is viable in technological advancements. Just as man technology possesses the capacity to decode, store and retrieve memories that are encoded into them by the human race. Though possessing the capacity to highly decode, store, retrieve and imitate, technological memory, can also be tampered with and be manipulated. Technology has thoroughly studied man over the years. Imitating man in the modern age is the easiest part for technology. However, with mere imitation technology could only be the shell of mankind an advanced imitation so to say. Man's uniqueness and his poetic beauty of imagination could never be imitated.

However, with the advancements in the field of AI, the recent advancement of ChatGPT, has brought about the basic imitation of human imagination. The short film, *Safe Zone* (2022), stands testimony to the aspect of technology delving into the individualist part of mankind. The film was written and directed by Open AI's ChatGPT in collaboration with 28 Squared Studios and Moon Ventures. The film poses a reminder of what could be possible in the future of memory and memory studies.

In the age of rapid technological advancements, the intersection of technology and memory has become inevitable and significant. From the advent of writing systems to the digital era, technology has continuously shaped the way humans perceive, record and recall information. Writing enabled the externalisation of memory; this enabled information to be recorded and preserved beyond the limitation of oral traditions. Gutenberg's printing press revolutionised the distribution of knowledge to the masses. The proliferation of materials democratised education and expanded collective memory. For instance, the spread of scientific knowledge during the Renaissance fuelled intellectual advancements that challenged established beliefs and fostered new ideas.

The digital age has ushered unprecedented opportunities alongside information overload, misinformation and digital distractions. This has reshaped the encoding, storage and retrieving of human interactions and memories. Social media platforms have altered the way man constructs and shares personal narratives. This aspect blurs the boundaries between real and digital identities, creating false narratives in the minds of ill-informed viewers who believe everything on the digital platforms to be just.

Technology apart from it's misuse that results in the spreading of false propaganda, has a positive side of sustenance. The immortal attribute of technology has the capacity to create archives that can preserve cultural heritage and historical knowledge for future generations. Digital repositories such as the internet archive and digital libraries, ensure the long-term accessibility of information, transcending geographical and temporal boundaries.

As a whole technology drives transformation in how man perceives, interacts with and preserves memory. From digital archives and augmented reality to neurotechnology and social media, advancements in this field hold immense potential for shaping the future of mankind. By harnessing the power of technology to understand and enhance human memory, man can unlock new possibilities for learning, creativity, and collective well-being. However, it is essential to address ethical, privacy, and equity concerns to ensure that technological innovations in memory studies benefits all of humanity. Through interdisciplinary collaboration and responsible innovation, man can chart a course towards a future where memory technologies empower individuals and enrich the collective human experience.

Klara the Artificial Friend is a fragment of the reality that is awaiting mankind in the future. Klara closely studies Josie and tries to understand her and the people around her as well. By trying to learn one person Klara finds herself learning other characters like Chrissie, Mr. Paul, Mr. Capaldi and Rick, who influence Josie to become the person she is. Klara clearly understands that just like herself, man also decodes, stores and retrieves memories that are encoded by the people around them. Josie as a person, Klara understands is the culmination of the situations and the people who love her. Klara is in no way different from Josie in that aspect. To Klara with observation comes feelings that are the direct result of stored memories that are corelated in every situation. The same goes with Josie who represents man to be the direct result of his thoughts and memories. A clear representation of this aspect in Klara's own words:

'Mr Capaldi believed there was nothing special inside Josie that couldn't be continued. He told the Mother he'd searched and searched and found nothing like that. But I believe now he was searching in the wrong place. There *was* something very special, but it wasn't inside Josie. It was inside those who loved her.' (Ishiguro 338)

With the revelations provided by Ishiguro through his novel Klara and The Sun one can only wait and see what the future holds in terms of technological advancements and its direct impact on humanity. The present advancements talk volumes in the perception of a future reality. The AI that are currently learning the nuances of being human would in the future possibly possess individualistic perceptions like man. With the capacity to become man, tend to his needs and store immense amounts of memory, AI in collaboration with humanoids would easily overshadow man in every aspect of life.

On analysing the post humanistic value of memory studies man tends to conveniently extend his memory into highly advanced technologies. Man's obsession over memory extension seems to stem from two polar reasons. One he either holds on to life in a narcissistic manner through lavishing capital in order to technologically sustain life or he tends to give into desperation and hold onto things that he loves and cherishes. Either way man highly depends on technology to hold onto his memories and create an identity that he would be remembered as even after his lifespan ends on this planet. Modern technological advancement similar to Klara that thrive akin humans serves testimony of a fragile minded population driven mostly by fear and desperation, resulting from an anti-social and greed driven society.

Ishiguro's Klara is a clear foreteller of what is to come in a near future that is competing not with fellow humans but with technology that is highly advancing in a pace faster than man can ever try to reach in decades of his existence. 'This takes place through a process of cognitive profiling mediated through electronic screens and televised gave whereby the deathless digital image becomes a spectral presence invading public as well as intimate spaces.' (Parui 167)

The field of memory studies encompasses a broad range of interdisciplinary approaches, including psychology, sociology, history. literature. neuroscience, and cultural studies. While the field has made significant strides in understanding memory processes and their implications, there are several promising avenues for future research and exploration. Overall, the field of memory studies offers vast opportunities for interdisciplinary collaboration and inquiry, with the potential to shed light on fundamental aspects of human cognition, society, and culture. By addressing these future research directions, researchers can deepen the understanding of memory and its profound impact on human experience.

Disclosure of interest:

In accordance with Taylor & Francis policy and my ethical obligation as a researcher, I am reporting that I have no relevant financial or non-financial competing interests to report.

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