

The Neuroscience of Trauma and the Exploration of Emotional Numbing and Memory Falsification in Ishiguro's Narrators

Tiyasha Roy¹ and Karishma Bisht^{2*}

School of Social Science and Humanities, VIT-AP University, Amaravati, 522237, India

Abstract

This study explores the relationship between neurocognitive trauma and emotional regulation in Kazuo Ishiguro's novels *The Remains of the Day*, *Never Let Me Go*, *When We Were Orphans*, and *A Pale View of Hills*. It examines how Ishiguro's unreliable narrators Stevens, Kathy H., Christopher Banks, and Etsuko embody psychological trauma through repressed memory, emotional numbing, and distorted recollection. Using a qualitative interdisciplinary approach that integrates literary analysis with neuroscience and trauma studies, the paper analyzes how narrative techniques reflect neurobiological responses such as hippocampal disruption, alexithymia, and confabulation. Through close reading and comparative analysis, the study shows that these narrators illustrate trauma induced cognitive processes including dissociation, memory distortion, and emotional detachment. The research contributes to trauma studies by bridging literary criticism and neuroscience and proposes that Ishiguro's unreliable narrators can be understood as representations of neurobiological processes underlying trauma, memory, and emotional regulation.

Keywords: Neurobiologization, Kazuo Ishiguro, Memory Falsification, Neuroscience,

Trauma

Introduction

Kazuo Ishiguro's novels determine a deep interest in memory, trauma, and the unreliability of the human perceptual process. The interconnection between psychoanalysis and neuroscience goes beyond evidence of efficacy alone. Psychoanalytic theories represent an important conceptual framework for neuroscientific findings, and similarly, neuroscience may help provide the neurobiological foundations to psychoanalytic concepts (Salone et al., 2016). His main characters, an aging butler holding on to the past, a detective recalling memories of childhood, a woman troubled by memories of her daughter's circumstances, or a clone struggling with existential despair, reveal a sort of dysfunctional relationship with their feelings and memories. This paper identifies and elucidates trauma, emotional regulation, and narrative unreliability in the novels *Never Let Me Go*, *A Pale View of Hills*, *The Remains of the Day*, and *When We Were Orphans*. By understanding the neurobiological and psychological aspects of trauma, this paper argues that Ishiguro's unreliable narrators are showing characteristics of cognitive dissonance due to trauma, emotional inhibition, and other neurocognitive impairments consistent with trauma theories and neuroscience. Memory and emotional regulation are two pivotal concepts in trauma studies about how people gain control after going through traumatizing experiences.

Cathy Caruth's work on trauma suggests that traumatic memories are composed of interrelated fragments and remain un-integrated into a singular, coherent narrative. Ishiguro's characters frequently demonstrate this concept, and often, they cannot acknowledge their painful past truths while engaging in self-deceiving patterns that are both subtle and rational and comprehensive. Because also painful experiences are a deviation from homeostatic equilibrium, the same principle can be applied to pain and to the pleasure deriving from the alleviation of pain (Moccia et al., 2018). Thus, when a threat to the internal equilibrium of an organism increases, unpleasant sensations grow stronger, and defense and avoidance mechanisms are immediately activated (Leknes and Tracey, 2008).

From a scientific perspective, an understanding of neuroscience can also shed light on the biological or neurobiological roles of trauma when discussing the brain structures involved in developing memory, and the neurobiological response to trauma (e.g., the amygdala, the prefrontal cortex, and the hippocampus). This paper aims to combine these perspectives by showing how Ishiguro's psychologies of characters and his narrative structures intersect with real cognitive and neurobiological-based responses to trauma. The psychoanalytic perspective on mental functioning can guide neuroscientific research toward a better understanding of basic psychodynamic concepts, such as the Ego, defence mechanisms, dream functions, and projection of mental states (Luciani et al., 2014), as well as enhance knowledge in the fields of memory, trauma, attachment, empathy, and the self. Specific topics (e.g., neural correlates of emotions and empathy) are nowadays considered important new areas of investigation (Panksepp, 1998; Gallese, 2008; Panksepp and Biven, 2012).

Ishiguro's unreliable narrators share an important feature, which is their detached and restrained form of narration. At first, they appear composed, rational, and even somehow emotionally restrained. However, strict control begins to slip away to reveal small signs of psychological distress in the form of contradictions, missing pieces of the narrative, or repressed memories. For example, Stevens from *The Remains of the Day* stays emotionally numbed to avoid facing his past. Research on the bodily self focuses on the development, maintenance, or disturbance of the link between a body and the experience of this body as "mine," a process that is also known as body-ownership (Gallese and Sinigaglia, 2010). His emotional incapacity aligns with alexithymia and, as in the narrative, often relates to neurons in the prefrontal cortex being inhibited from holding onto feelings effectively after long-term emotional suppression. Christopher Banks from *When We Were Orphans* employs a delusional narrative to evade childhood trauma, presenting signs of confabulation and dissociation, a cognitive defense mechanism associated with altered hippocampal function in PTSD patients.

Etsuko from *A Pale View of Hills*, like Banks, demonstrates projective memory displacement, shifting the narratives of events in a way that skirts her guilt and trauma. Finally, Kathy H. from *Never Let Me Go*, while appearing resigned to her fate, exemplifies emotional bluntness, which is a well-known neurobiological response following an extended period of distress. In Kazuo Ishiguro's work, the narrators are architects of their own self-deception, building up bounded narratives to protect themselves from the unbearable weight of the past and unprocessed trauma. The narrators' narratives seem, at first, calm, rational, or even dignified. However, beneath the surface of each controlled, composed piece of prose, there is an underlying thread of psychological distress made manifest

through contradictions, gaps of memory, and unsettling omissions. The narrators are cut off from reality, captive to their own minds as they use cognitive defence mechanisms that engage elements of the brain's neurobiology in relation to trauma. Emotional detachment is not merely a literary or narrative device; instead, it is a fully realized learned survival mechanism that correlates to the brain's inability to regulate emotion or process memories in the face of trauma. When reading Ishiguro's works through a lens of neuroscience, his fiction explores, in any number of historical or cultural contexts, how the mind reconciles trauma by distorting reality itself.

Stevens, the faithful butler in *The Remains of the Day*, portrays the neurocognitive consequences of enduring emotional repression. *The Remains of the Day* seems to know 'about something' that is indexed by the labyrinthine nature of Stevens' thought processes and the circuitous, indirect nature of his narrative account (Rizq, 2023). His unwavering commitment to professionalism and his unquestioning commitment to dignity serve as psychological armor, protecting him from the painful knowledge that he has wasted his life providing blind service to a morally ambivalent employer. His emotional detachment was especially troubling: his memories of the past are described mechanically, but he does not truly engage with the affective elements of these moments. Neuroscience studies show that alexithymia, or the inability to identify and describe emotions, is often observed because suppression of emotions leads to decreased activation in the prefrontal cortex, where emotional regulation and self-awareness take place. Stevens's difficulty in recognizing his own heartbreak, his inaction regarding Miss Kenton, and his misplaced loyalty to Lord Darlington clearly demonstrate alexithymia. His meticulous recitation of his memories is not merely a strategy of self-control, but a neurocognitive basis for emotional detachment induced by trauma. By the time he allows himself to contemplate regret, it is too late; his self-imposed numbness has rendered him incapable of true emotional catharsis. His life has been lived in service to an ideal, yet that ideal was hollow, and now, all that remains is a void he cannot fully acknowledge.

In *When We Were Orphans*, Christopher Banks exhibits a different yet equally fascinating manifestation of neurotrauma stemming from the distortion of memory and confabulation, which is his obsessive search for his missing parents that he believes he can rescue years later after their disappearance. The obsession that drives a disconnection of memory and reality is very compelling and hints at the intersections of neuroscience, as we learned previously, with hippocampal dysfunction in PTSD patients, where trauma survivors either reconstruct or distort the past to cope. Banks' memories from childhood appear to have shifted and reshaped themselves, rather than being static and reliable, to make sense of his obsession. The dream-like and almost surreal narrative of the novel suggests that Banks is not only unreliable but a victim of his brain seeking to create rational meaning where there is none. Banks' delusional belief that he could restore order to his past is dissociative at its core, a psychological defense mechanism where someone must detach from reality due to trauma to survive the emotional pain. Banks' inability to create solid reconciliation with the past keeps him in a continual state of emotional suspension-his life becomes a continual effort to resolve a trauma that has already, neurologically and psychologically, fractured his sense of self. His quest is not just for his parents; it is for an impossible resolution, a cognitive mirage that trauma survivors often chase but never find.

Etsuko in *A Pale View of Hills* is a more nuanced but no less devastating example of neurocognitive trauma. Her story, told seemingly about her past in Nagasaki, is disjointed and evasive, her feelings purposefully displaced onto another woman, Sachiko. What is most remarkable about Etsuko in telling her story is her distancing from confronting her own trauma, engaging with her feelings and guilt instead through this hazy figure. Etsuko individualizes the trauma through projective memory displacement, when a person projects their internalized unresolved struggles onto an individual to maintain a level of distance between engagement of their trauma. Additionally, the implications of Etsuko's story also indicate avoidant coping strategies from a neuroscientific perspective. Essentially, this indicates that her mind is actively suppressing distressing memories, resulting in altered recollections that are reinterpreted altogether. As a result, the elliptical opening of the novel and refusal to yield closure parallel how trauma is processed in the brain. The complexity of trauma is that painful memories do not come back in a sequential timeline, and emerge in jumbled pieces that are weighted with affect and lacking authenticity. Etsuko's detachment is not about not feeling; it implies limiting the impact of trauma to the extent that her mind will not allow it to be confronted.

Kathy H. in *Never Let Me Go* illustrates yet another example of trauma processing and emotional regulation that both aligns with, and offers a striking contrast to, emotional blunting as a neurobiological outcome of chronic distress. Unlike Stevens, Banks, or Etsuko, she does not appear to fight her fate; she seems unnaturally composed, as if she has learned to tell her story without anger or overt sadness, even in the face of what she describes as horrific. As a clone who was bred to be an organ donor, Kathy H. has lived her entire life in the shadow of irrevocable loss. While her memories are authentic and personal, she can tell her story with an eerie acceptance that provides a clear line to the emotional blunting referred to as a physiological response to chronic stress and trauma. Research on the effects of prolonged trauma on the brain has suggested that the amygdala, a part of the brain that controls fear and emotional processing, can become overactive (heightened anxiety) or "blunted" (depressed emotional reactions), and Kathy uses the narrative process to achieve the latter. Kathy's emotional response appears to blur into either clinical detachment or sheer emotional dulling, in which she is recounting her story in a very methodical, almost gentle tone, and yet there is this unsettling lack of depth that implies she has learned the practice of detachment without truly facing her ongoing suffering. Her failure to resist, her unflinching acceptance, is not a lack of trauma, but its most nefarious form: her brain, like the brains of many trauma survivors, has chosen to numb her feelings, to the extent that she is not even aware that she is grieving or fighting at all.

What brings the narrators together is their shared commitment to self-deceit for emotional survival. Their unreliable narratives are not some kind of literary device but a symptom of how the brain protects itself from intolerable reality. Neuroscience tells us that trauma breaks up the normal processing of memory, and we are often left with fragmented memories, no emotional access to those memories, or even some false memories to achieve some logical force on a chaotic trauma. The narrators in Ishiguro demonstrate this at every turn: through Stevens' quiet denial, Banks' confabulated memories, Etsuko's projective narration, or Kathy's dampened acceptance. In some way, their disconnect from ease is not a failure; it is a symptom, an unspoken homage to the lingering scars of trauma.

Thus, Ishiguro's writing represents more than simply engaging with unreliable narration. It is a deep reflection on the neurological and psychological conditions of trauma. His characters do more than just narrate stories; they create cognitive fortresses to shield themselves from the raw strength of emotions they cannot capture fully. These narratives are acts of survival, and within that survival, we discover the quiet ruin of trauma, not in actual sites of suffering (though there are several), but in the silences, the omissions, the restraint of the prose, speaking volumes in what it refuses to say. Attending to Ishiguro's unreliable narrators through the lens of neuroscience affirms that we not only deepen our understanding of the depth of their fractured psyche, but we also know this sense of coming to a language with, knowing trauma is a universal experience, it shapes us, rewires our minds, and leaves traces in our minds unarticulated, often unconsciously.

Review of Literature

Kazuo Ishiguro's work has been analyzed thoroughly according to several different topics, such as unreliable narration, psychological complexity, memory, mourning and loss, and repression, but the intersection of neuroscience, trauma studies, and unreliable narration has not been adequately explored. This literature review analyzes Ishiguro's novels and the various traumatic conventions through trauma fiction (Anne Whitehead), neurocognitive selfhood (Antonio Damasio), and cerebral woundedness (Catherine Malabou), as a means to examine the influence neurotrauma has on memory, self-object perception, and emotional regulation in his unreliable narrators. Neuroscientific research has recently moved away from the traditional field of cognitive sciences (language, memory, attention, perception, etc.) towards the study of mental disorders, to investigate possible modifications in neural patterns related to clinical improvements following psychotherapeutic interventions (Kandel, 1998; Demertzi et al., 2009; Cozolino, 2010; Toyokawa et al., 2011).

Trauma Fiction and Ishiguro's Narrative Techniques

In her book *Trauma Fiction*, published in 2004, Anne Whitehead provides a foundation for analyzing trauma in contemporary literature and claims that trauma fiction often contains deviations from traditional linear narration, intersectional repetitive moments, and/or unreliable narrators to display the fragmentation of traumatic memory. This bears striking similarities to Ishiguro's narrative style, wherein his protagonists Stevens (*The Remains of the Day*), Christopher Banks (*When We Were Orphans*), Etsuko (*A Pale View of Hills*), and Kathy H. (*Never Let Me Go*) structure their own stories in ways that obscure, revise, or distort reality. Whitehead print, while trauma fiction does not follow a more traditional linear form, it creates narrative gaps, silences, and unresolved tensions. Ishiguro's novels capture these elements as memory is not just unreliable, it is also a part of the psychological and emotional necessity of the narrator. For example, Stevens' hindsight narration is inherently also omissions or contradictions as he refuses to acknowledge any failure in his behavior. In a like manner, when Christopher Banks tries to recreate his past, like a detective, his ideological reconstruction is often confabulated due to the mind's attempts to impose order onto the unresolved trauma. Many of Ishiguro's first-person narrators, who utilize shifts in time and subjectivity of memory, recount how

trauma is disruptive to the brain's capacity for any coherent structuring of memory.

Neuroscientific Perspectives on Trauma and Selfhood: Antonio Damasio's Theory

Self Comes to Mind: Constructing the Conscious Brain (2010) by Antonio Damasio examines consciousness, memory, and the self, and provides a neurobiological frame for considering Ishiguro's concerns with identity and emotional denial. A "minimal self" (Gallagher, 2000; Gallagher and Frith, 2003) or a "core or mental self" (Damasio, 1999, 2003), an "autobiographical self" (Damasio, 1999, 2003), and a "narrative self" (Gallagher, 2000; Gallagher and Frith, 2003) have also been described. Beyond differences in definitions, it is possible to identify "self-related processes, which comprise stimuli that are experienced as strongly related to one's own person.

Damasio believes that the self is perpetually in flux rather than a fixed entity, and his position is that memory, emotions, and the body's neurobiological processes all play a role in constructing the self. His differentiation between the core self (basic consciousness) and the autobiographical self (constructed identity built on one's experiences) can be an effective lens for interpreting Ishiguro's narrators. In *The Remains of the Day*, Stevens embodies this neurocognitive conflict; his autobiographical self is carefully developed to revolve around his profession, while his core self is informed by repressed emotional struggle and remorse, and is not immediately accessible. This conflict is not sustainable and leads to his emotional stultification, which corresponds to Damasio's view that once the connection between memory and emotions is fractured, the self frays into an incomprehensible self. Etsuko's narration in *A Pale View of Hills* shows something similar, where her autobiographical self holds on to one way of framing the events, in this case, one that distances her from feelings of culpability, even when her unconscious is agitating towards a deeper buried truth. Damasio's work on emotion and decision-making also illuminates Kathy H.'s behavior in *Never Let Me Go*. Damasio has found that long-term exposure to distress tends to hinder amygdala (emotion) activity, resulting in the emotionless and detached responses that Kathy presented. Kathy's passivity is not solely the result of social conditioning; it can also be seen as a neurobiological response to existential distress, where survival is dependent upon emotionlessness rather than active resistance.

Catherine Malabou's "Cerebral Woundedness" and Neurotrauma in Ishiguro's Narrators

In her book *The New Wounded, From Neurosis to Brain Damage* (2012), Catherine Malabou articulates the notion of "cerebral woundedness" to shift the paradigm of trauma away from classic psychoanalytic traditions and toward something more neurological. Malabou argues that trauma is not merely psychological in nature; rather, trauma in a more substantive way changes the brain's wiring, shifting the brain's capacity for identity properties and cognitive functions at the neurological level. This theory is important in considering Ishiguro's characters, whose traumatic pasts become more than haunting; they reconstitute the very nature of self. While their injuries do not destroy, they obliterate past and future, and it is this that makes them more than analogues for complexes: trauma's effect in Malabou's notion produces a 'lack of identity' or loss of identity that cannot be confined to simply repression, but rather a rupture in the brain's capacity to sustain a coherent narrative of self. This resonates with Christopher Banks' dissociative space in *When We Were Orphans*, where even

though Banks has remade memories, he has reconstructed them in a way that enables him to maintain a form of self-delusion. Banks is not a mere misrememberer; the configuration of his brain has remade and tautologized the past to create a version that allows him to conduct himself without being hampered by the truth of that past. Etsuko's unreliable narration in *A Pale View of Hills* occupies a similar space of traumatic cerebral transformation; her mind prohibits and intervenes in the event of trauma to integrate the trauma directly, projecting guilt and meaning onto a projected entity of Sachiko. According to Malabou, such trauma-induced cognitive restructuring results in a "new wounded" self, where memory distortions are not just psychological defenses but evidence of neuroplasticity responding to trauma in real time.

Bridging Literary and Neuroscientific Approaches

The merging of Whitehead's trauma fiction framework, Damasio's neurocognitive notion of selfhood, and Malabou's cerebral woundedness theory provides a much richer approach to reading Ishiguro's unreliable narrators. Their fragmented memories, explicit emotional blunting, and distorted reasoning act not just as thematic concerns but rather indicate trauma's experiential impact on the brain. By synthesizing neuroscience with the interpretive framework of literary analysis, this study builds on the justification of viewpoint in Ishiguro's unreliable narrators and challenges the received view that these narrators exist along the continuum of subjective and evasive. Rather, this paper offers an understanding of unreliable narrators in a neurocognitive trauma framework where memory is not just distorted, but is neurobiologically distorted to safeguard the self from dissolution. This study facilitates an overlapping of literary trauma studies and contemporary neuroscience and presents a new lens for understanding Ishiguro's engagement with concepts of memory, identity, and self-deception.

Jaak Panksepp's Affective Neuroscience Theory (ANT) belongs to the most prominent emotion theories in the psychological and psychiatric sciences. ANT proposes the existence of seven primary emotional systems deeply anchored in the mammalian brain (Panksepp, 2013). Jaak Panksepp's Affective Neuroscience (2013) presents a convincing and original perspective on the emotional suppression and memory distortion present for Ishiguro's protagonists. Panksepp discusses how extended emotional disruption alters limbic system functioning, which results in either a hyperactive fear response or reactivity to the absence of emotions. Stevens from *The Remains of the Day* demonstrates his own pre-frontal overactivity, which prioritizes logic over feelings, suppresses grief, and misrepresents his own past. Kathy H. in *Never Let Me Go* demonstrates emotional blunting, an adaptive process in which prolonged affective distress diminishes emotional intensity. Christopher Banks (*When We Were Orphans*) also displays hyperactivity in his own seeking circuitry, as he pursues a counterfactual detective fantasy rather than engaging.

The dialogue between cognitive neurosciences and psychoanalysis is not new, but recently it has become more prolific in the exploration of the relationship between mind and brain, already wished for by Freud more than a century ago and, among others, by the Nobel Prize winner Kandel (1999),

when he asserts that psychoanalysis still represents the most coherent and intellectually satisfying view of the mind and can help neurobiologists to plan their work (Cieri & Esposito, 2019).

Cieri and Esposito (2019) highlight that the brain works to reconstruct memories rather than save them as exact, or fixed, records, a reconstruction process that is prone to errors, especially in survivors of trauma. This phenomenon is manifested in Ishiguro's narrators, and more specifically in the narrator Christopher Banks in *When We Were Orphans*, as he struggles to piece together disrupted or fragmented memories, and erects a detective fiction to find some coherence to the events he recalls and to "fill in" blank memory spaces. This type of reconstruction is commonly referred to as confabulation, which is the brain's attempt to create a narrative in the context of trauma and memory disruption. Additionally, Etsuko, the narrator, in *A Pale View of Hills* engages a strategy of dissociating from trauma and re-experiences it through Sachiko, as she narrates the past to evade guilt. Both examples are consistent with the emerging research that shows that trauma disrupts the normal functioning of the hippocampus and leads to altered or selective memory suppression, abridged narratives, or conflicting narratives of the same event.

The old reduction of mental functions to brain structures still finds numerous supporters and attempts. As Tretter and Löffler-Stastka (2018) pointed out, this attempt encompasses a lot of well-known epistemological, methodological, and conceptual inconsistencies (Block, 1980; Chalmers, 1996; Craver, 2007). This discussion is especially meaningful in the context of Ishiguro's writing about unreliable narration, memory, and repressed feelings. The claim that mental function can never equate simply to brain structure parallels Ishiguro's narrators, who are unable to hold rational thought aligned with emotional experience, frequently to the point of distortion, contradiction, and/or repression of feelings. Tretter and Löffler-Stastka's (2018) critique of neuroreductionism posits that understanding the mind involves both neurological and psychological perspectives as opposed to simply reducing mental states to brain structure. This shows up in Stevens in *The Remains of the Day*, who epitomizes extreme rationalism while remaining emotionally vacuous; the experience of grief and desire cannot be explained only as a neurological process inhibition located in the prefrontal cortex, it must include social constructs, history, and psychoanalytic defense mechanisms. Similarly, Christopher Banks in *When We Were Orphans* constructs a narrative based on fantasy, which again cannot be understood as simply dysfunction in the hippocampus, but involves psychological survival mechanisms. Thus, while neuroscience is valuable in explaining memory distortion, blunting emotions, and responses to trauma, Ishiguro's fiction demonstrates that human lived experience extends beyond that of brain function, to that of subjectivity, repression, and desire; the very epistemological difficulty of subject that Tretter and Löffler-Stastka (2018) described.

Objectives

1. To examine the association of neurocognitive trauma and emotional regulation in Kazuo Ishiguro's novels.
2. To examine how Ishiguro's unreliable narrators, like Stevens, Kathy H., Christopher Banks, and Etsuko, portray the psychological complexities of trauma.

3. To investigate the role of emotional numbing and memory distortions in the cognitive and affective experiences of Ishiguro's protagonists.
4. To analyze the influence of proxy trauma on cognition and emotional regulation in Ishiguro's narratives.
5. To assess the intersection of neuroscience and literary analysis to study identity and narrative trauma.
6. To add to the interdisciplinary field of neurobiological research and trauma through the vision of literature and memory distortion.

Methods

This study takes an interdisciplinary, qualitative approach to social science with a mixture of literary studies, psychoanalysis, and cognitive neuroscience, as it engages with how trauma and emotional regulation shape the unreliable narrators in the fiction of Kazuo Ishiguro. A close reading of works, such as *The Remains of the Day*, *Never Let Me Go*, *A Pale View of Hills*, and *When We Were Orphans*, was conducted with the support of neuroscientific theorizing on memory distortion, emotional inhibition, and trauma responses.

The theoretical framework of this study is largely grounded in trauma studies, especially Anne Whitehead's *Trauma Fiction*, with an examination of fragmented and unreliable narration as a response to cognitive or psychological injuries. Also, the works of Antonio Damasio's *Self Comes to Mind* and Jaak Panksepp's *Affective Neuroscience* offer ideas on how trauma alters memory processing, emotional habits, and the extension of self, while Catherine Malabou's notion of cerebral woundedness from *The New Wounded* helps inform the neurological and psychological wounding of Ishiguro's narrative methods.

This literary analysis focuses on both memory distortion and the story type in Ishiguro's fiction, drawing links to unreliable narration, connection to hippocampal dysfunction, and confabulation (Cieri & Esposito, 2019). Emotional regulation is contextualized on the neurological spectrum through alexithymia (an emotion regulatory impairment, prefrontal cortex inhibition) seen in Stevens' emotional dullness, Kathy H.'s emotional flattening, and Christopher Banks's deterioration with said reality. (Murphy & Kelly, 2019). Psychoanalytic theories focus on the unconscious defense mechanisms of dissociation, repression, and projection as Ishiguro's narrators implicitly reconstruct their past to obscure traumatic episodes. Comparisons to recent neuroscientific investigations focused on PTSD, memory, and emotional suppression will also adopt more context around these behaviors and show how Ishiguro's fiction reflects clinical presentations of trauma survivors. Assessing the scientific investigation with literary inquiry offers new avenues for interpreting how neurotrauma can impact identity, memory, and emotional resilience within Ishiguro's literature.

Research Design

This study employs a qualitative research design that uses textual analysis with an interdisciplinary comparison of the two topics we decided to examine, neurotrauma and emotional regulation, within

Ishiguro's unreliable narrators in an interpretative sense and post-structurally. The novels utilized, *The Remains of the Day*, *Never Let Me Go*, *A Pale View of Hills*, and *When We Were Orphans*, are surveyed holistically, using lenses from literary studies, psychoanalytic inquiry, and neuroscience inquiry. By looking across Ishiguro's narrative methods and neurotrauma studies in impact memory, cognitive neuroscience, and affective psychology studies, the study observes similarities in memory distortion, emotional inhibition, and dissociation occurring across the texts. In comparison to empirical neuroscience studies on PTSD and emotional numbness, the study provides a comprehensive understanding of the impacts of trauma on narrative identity and the process of identity formation.

Research Approach

This study uses an interdisciplinary research approach, which includes literary analysis, psychoanalytic theory, and cognitive neuroscience, to explore how neurotrauma alters content difficulty and unreliable narrators in Ishiguro's fiction. It utilizes a hermeneutic approach to investigate how trauma manifests as memory distortions, affect dysregulation, and dissociation as elements of the unreliable narrator in Ishiguro's *The Remains of the Day*, *Never Let Me Go*, *A Pale View of Hills*, and *When We Were Orphans*. This research applies trauma studies, with visions and understandings from neuroscience about PTSD, affect regulation, and alexithymia, to bridge literature and science to gain a sophisticated understanding of how Ishiguro's characters work to reconstitute their pasts in service of reconciling psychological trauma.

Selection of Texts

The research deals with selected novels by Kazuo Ishiguro that significantly explore trauma and memory, such as:

1. *The Remains of the Day* (1989)
2. *Never Let Me Go* (2005)
3. *A Pale View of Hills* (1982)
4. *When We Were Orphans* (2000)

Method of Analysis

The research employs a thematic and comparative analytical method grounded on a reading of literature that augments psychoanalytic interpretation with neuroscientific correlation to explore trauma and emotional regulation in the unreliable narrators of Ishiguro's work. Thematic analysis practices identify thematic traces in the text, what Denzin calls "motifs," which share a thematic quality of memory distortion, emotional repression, and dissociation, possibly aligned to trauma experience in neuro-cognitive responses to trauma. Through comparative analysis comparing Ishiguro's narrative practices to clinical research on PTSD, emotional blunting, and confabulation, convergences between fiction and neuroscience perspectives are explored and compared. In addition, psychoanalytic discourse analysis examined unconscious mechanisms of repression, projection, and

denial, contributing to the narrator's unreliable narration, as well as considering the implications of neurotrauma on identity and narrative coherence.

Data Collection and Construal Interpretations

This investigation utilizes secondary data gathering, in the form of primary texts, academic reviews, and neuroscientific studies, to investigate the impact of trauma and emotional dysregulation within Ishiguro's unreliable narrators. The primary data includes close readings of Ishiguro's novels, *The Remains of the Day*, *Never Let Me Go*, *A Pale View of Hills*, and *When We Were Orphans*, which are implied for themes of memory distortion, emotional blunting, and dissociation. Secondary data comes from trauma studies, psychoanalytic theory, and research in cognitive neuroscience, and refers to the works of scholar Anne Whitehead and neuroscientists Antonio Damasio and Catherine Malabou. The construal interpretation is influenced by a hermeneutic approach, which examines narrative inconsistencies, omissions, and contradictions in terms of trauma theory and resultant neurocognitive dysfunction. This paper investigates the ways Ishiguro's narrators unconsciously reconstruct the past to hide their psychological injuries, through comparison of textual evidence found in Ishiguro's novels with research on PTSD, affect regulation, and hippocampal function. The interpretations illustrate how this connection between narrative and trauma, both psychological and neurological, is positioned in Ishiguro's work, further demonstrating how he makes fiction scientific in therapy's response to distress and suppression of memory.

Ethical Consideration

Since this research is qualitative and does not involve human participants, ethical concerns mainly have to do with academic integrity. The study maintains proper citations and adherence to ethical research standards throughout the process. Using this structured research design, the study ensures an inquiry into a complete and interdisciplinary reading of Ishiguro's fiction, benefiting both the literary and psychological discourses on trauma and memory.

Variable of the Study

The present research examines independent and dependent variables to investigate how neurotrauma and emotional regulation shape Ishiguro's unreliable narrators. The independent variables consist of trauma exposure, which includes elements such as childhood loss, war, and social isolation that disrupt psychological resilience, as well as memory distortion mechanisms (e.g., confabulation, repression, dissociation) that emerge as consequences of disrupted experience. Strategies for emotion regulation (e.g., alexithymia, emotional suppression, and affective blunting), and social/cultural pressures related to duty, hierarchy, and obligation to others, also influence their self-perception and the choices they make about their behavior. Dependent variables assess the psychological and narrative effects of experiencing trauma, making alterations to personal narratives (e.g., memory alterations), and emotion regulation.

Narrative unreliability appears in the form of contradictions or omissions, as well as selective reconstruction of memory, and occurs as readers identify nihilistic versions of a character's narrative of events, which makes it difficult to trust their version of events. Cognitive dissonance emerges for

characters as they struggle between rationalizing their past and being pushed to suppress updates from unresolved emotions, and along the way, the delay leads to emotional detachment, where characters (e.g., Stevens, Christopher Banks, Etsuko, Kathy H) show an inability to feel full grief, love, or remorse. Lastly, characters exhibit identity fragmentation as self-deceptive narratives where they shift their self-perception and understanding, which shape their identity. The trauma exposed in children's lives encompasses how trauma reconstructs overall self-perception and past experiences, in contrast to a clean self-narrative. By considering these variables, this research draws connections between literary analysis, neuroscience, and trauma studies to provide a complex understanding of how Ishiguro's narrators deal with psychological injuries that involve memory distortion and emotional repression.

Result and Discussion

The research of this research reveals that neurotrauma has a significant impact on the narratorial construction and psychological richness of Ishiguro's unreliable narrators. Within *The Remains of the Day*, *Never Let Me Go*, *A Pale View of Hills*, and *When We Were Orphans*, a consistent pattern can be observed: characters experience distorted memories, emotion suppression, and self-deception as psychological adaptations to their unaddressed trauma. These patterns reflect neuroscientific datasets on PTSD, alexithymia, and affective blunting that indicate trauma alters a person's behavior when remembering and disclosing emotions, and Ishiguro deftly incorporates each of these patterns into his narratives.

Inclusion Factors

- *The Remains of the Day*, *Never Let Me Go*, *When We Were Orphans*, and *A Pale View of Hills* were selected because they all center on trauma, where characters' actions, feelings, and thoughts are rooted in and influenced by prior, traumatic incidents.
- The fiction is organized according to unreliable narrators in the novels, Stevens, Kathy H., Christopher Banks, and Etsuko, because they are cognitively and emotionally distorted through a traumatic lens, and their responses are born from the dubious realism of the events.
- These novels were chosen for their characters, who are psychologically complex and whose feelings of emotional numbing through trauma, feelings of guilt, and distortion of the past are all enactments of cognitive processes characteristic of trauma.
- The structure noted in the novels above, significantly through memory reconstruction and the character's traumatic events, is pertinent for examining the relationship between neurocognitive trauma and emotional regulation in contexts of literature.
- The interdisciplinary nature of the novels and their apparent intersections with psychology, neuroscience, and literary analysis make them an integral source for examining the intersection between neurocognitive trauma and emotional regulation in literature.

Exclusion Factors

- Novels outside of this selection were ruled out because they do not concern trauma as the central psychological motif, thereby restricting the relevance of such novels to this research on neurocognitive trauma.
- Novels not involving unreliable narrators or with definitive trauma reactions were ruled out since they do not provide the opportunity for intense examination of neurobiological misrepresentations within the narrative.
- Novels that lack psychological complexity in characters, or novels that do not show evidence of clear connections between memory and trauma, were not included in this analysis.
- Novels that do not include major narrative reconstruction or the psychological aftereffects of trauma were not included, as they would not be compatible with the theme of this research.
- Novels that fail to show interdisciplinary applicability between neuroscience, psychology, and literary analysis were excluded because they would not add to the novel perspective of this research.

One of the more consequential findings is related to confabulation and selective recall of memories experienced in Christopher Banks (*When We Were Orphans*) and Etsuko (*A Pale View of Hills*), specifically, Christopher uses and builds an elaborate but fictive detective story to artificially draw connections between disjointed memories of trauma from his childhood, and demonstrates symptoms similar to disruption of the hippocampus and dissociative identity reconstruction (Cieri & Esposito, 2019). Similarly, Etsuko, without conscious effort, projects responsibility for her guilt onto Sachiko; this is an ideal example of memory disassociation used as a defense mechanism. In both examples, we see how traumatic experiences result in neurocognitive alterations, thereby distorting personal histories, thus requiring narrators to establish new derivatives of their pasts to retain psychological integrity.

Another significant point is emotional numbing and suppression, as indicated by Stevens (*The Remains of the Day*) and Kathy H. (*Never Let Me Go*). Stevens' steadfast rationality and denial of his own feelings illustrate alexithymia, which is correlated to frontal lobe inhibition occurring following prolonged emotional suppression (Tretter & Löffler-Stastka, 2018). Stevens' inflexible self-discipline inhibits his ability to process feelings of regret, as trauma survivors suffer from affective blunting as a defense. Conversely, Kathy H. too passively accepts her condition as a clone, demonstrating emotional detachment given the upsetting nature of the fundamental fact of her life. She displays no overt effort of resistance, which is in line with the chronic exposure to trauma literature regarding reduced emotional reactivity and learned helplessness.

Additionally, Ishiguro's unreliable narrators exhibit what Catherine Malabou (2012) calls "cerebral woundedness," which describes how an individual undergoes a permanent change in character due to being traumatized. This idea of having a wound in their cerebral cortex is most pronounced in Christopher and Etsuko. How both characters illustrate a multifaceted approach to identity, along with their self-portraits as deconstructed identity fragments, resonates not only the inherent instability we

find ourselves in in terms of trauma's impact on our neurology, but the reconstruction of self that trauma necessitates.

Iniquitously, their narratives echo a symphony of non-linear dilemmas, a review of self and identity, omitting poorly described details, filled with justifications of themselves that tell us their stock of memories and memories are not failing them but rather have been reshaped by the brain out of necessity for the creation of meaning, while after the occurrence of an emotional distress experience. This resonates with Damasio's (2010) concept of a self that is "a neurobiological narrative." That is, the self is held together through memory, emotional dispositions, and the states of mind that emotions yield after trauma.

The findings show that Ishiguro's narrators exhibit real trauma responses through their narrative styles, forgetting of memories, and emotional aloofness. By bringing literary analysis and neuroscientific approaches together, this study shows Ishiguro's unique skill in converging trauma, cognition, and emotion regulation through rich, complex, mentally traumatized characters. This points to literature and fiction contributing to both literary trauma study and cognitive neuroscience, showing that fiction is a deep form of insight to understand the neuro-cognitive aspects of trauma.

Implications

- This study establishes a connection between neuroscience and the interpretation of literature, to show how the consequences of neurocognitive trauma are represented in written works and literary characters.
- The study advances trauma research by addressing issues of memory distortion, emotional suppression, and dissociation, while crossing the boundaries of psychological theory and neuroscientific evidence.
- The study provides a unique vantage point for understanding unreliable narrators, arguing their narrative inconsistency is a product of neurobiological responses to trauma, and not solely subjective bias.
- This inquiry also helps to inform clinical implications, when a psychologist or clinician better understands the implications of cognitive and emotional effects depicted in literature about trauma on their patients who are trauma survivors.
- The study serves not only as an example of interdisciplinary research but also as an invitation for more interdisciplinary studies on how neuroscience and literature may work together to grapple with the mystery of the human mind and its response to trauma.

Conclusion

The unreliable narrators in Kazuo Ishiguro's work are illuminating portrayals of neurotrauma, emotion regulation, and memory distortion, and speak to the intersections between literature, psychoanalysis, and cognitive neurosciences. Through the trauma studies and neuroscience lens, this paper has shown how Stevens (*The Remains of the Day*), Kathy H. (*Never Let Me Go*), Christopher Banks (*When We Were Orphans*), and Etsuko (*A Pale View of Hills*) manifest the cognitive and emotional impact of trauma in their narrative presentations and psychological

coping strategies. Their recollections of memories from the past, affective numbing, and dissociative tendencies parallel neurocognitive, cognitive, and emotional responses to distress and loss, which demonstrates Ishiguro's genius in depicting human consciousness and its fragility.

Perhaps the most prominent example is illustrated by the theme of memory distortion that this paper discusses in the book, shaped by psychological trauma that is rooted in the neurological impulse created by compromised functioning of the hippocampus and frontal cortex. As mentioned, Christopher Banks reconstructs his childhood in a detective manner, driven by confabulated moments of psychological distortion that are experienced by many individuals with post-traumatic stress disorder (Cieri & Esposito, 2019). In a likewise tone, Etsuko's pervading inward narrative shift shows displacement; her guilt takes form in her recounting of Sachiko's account, her own fear, and expectation. This is somewhat like Malabou's (2012) notion of "cerebral woundedness," where trauma restructures an individual from within the mind. These two vignettes demonstrate that Ishiguro's narrators are not merely unreliable because of contextualized bias, but because of neurobiological manifestations that we recognize as psychological distress.

The study illustrates the formal themes of emotional suppression and alexithymia that exist in Ishiguro's characters through emotional inability, principally in Stevens and Kathy H. Stevens's rigid commitment to professionalism and rationality, which is a hallmark of decreased frontal inhibition and contextually associated with emotional blunting and failure to adequately process affect (Tretter & Löffler-Stastka, 2018). Kathy H. can also be said to demonstrate learned helplessness; her depiction of chronic trauma implies a detached acceptance of fate from the way she engages with her hopeless position in the dystopian reality of Hailsham. These phenomena further substantiate Damasio's (2010) emphasis on self-identity as a neurobiological notion constituted by trauma and the human experience of affect.

In conclusion, this study shows that Ishiguro's fiction is more than just a study of human emotion; it is, importantly, a narrativized reflection of neurocognitive trauma. His narrators, who, in terms of their own experiences, deal with suppressed grief, restructured memory, and affective blunting, illustrate how the brain keeps a vigilant watch on the self and protects itself from psychological harm by constructing narrative and withdrawing from emotion. By crossing literary studies with neuroscience, this research introduces a different approach to examining unreliable narration as a cognitive/ neuropsychological process that greatly advances our knowledge of Ishiguro's literary accomplishments, as well as the regional dynamics of the human mind's response to trauma.

References

- Block, N. (Ed.). (1980). *Readings in philosophy of psychology* (Vol. 1). Harvard University Press.
- Chalmers, D. J. (1996). Search for a fundamental theory. *The conscious mind*.
- Cieri, F., & Esposito, R. (2019). Psychoanalysis and neuroscience: the bridge between mind and brain. *Frontiers in Psychology*, 10, 1790.
- Connolly, J. P. (2016). *Principles of organisation of psychic energy within psychoanalysis: a systems theory perspective* (Doctoral dissertation, University of South Africa).
- Damasio, A. (2003). Feelings of emotion and the self. *Annals of the New York Academy of Sciences*, 1001(1), 253-261.
- Damasio, A. R. (1999). *The feeling of what happens: Body and emotion in the making of consciousness*. Houghton Mifflin Harcourt.
- Gallagher, H. L., & Frith, C. D. (2003). Functional imaging of 'theory of mind'. *Trends in cognitive sciences*, 7(2), 77-83.
- Gallagher, S. (2000). Philosophical conceptions of the self: implications for cognitive science. *Trends in cognitive sciences*, 4(1), 14-21.
- Gallese, V. (2008). Empathy, embodied simulation, and the brain: Commentary on Aragno and Zepf/Hartmann. *Journal of the American Psychoanalytic Association*, 56(3), 769-781.
- Gallese, V., & Sinigaglia, C. (2010). The bodily self as power for action. *Neuropsychologia*, 48(3), 746-755.
- Kandel, E. R. (1989). Genes, nerve cells, and the remembrance of things past. *The Journal of neuropsychiatry and clinical neurosciences*, 1(2), 103-125.
- Kandel, E. R. (1998). A new intellectual framework for psychiatry. *American journal of psychiatry*, 155(4), 457-469.
- Kandel, E. R. (1999). Biology and the future of psychoanalysis: a new intellectual framework for psychiatry revisited. *American Journal of Psychiatry*, 156(4), 505-524.
- Kelly, P. J., Camps-Renom, P., Giannotti, N., Martí-Fàbregas, J., Murphy, S., McNulty, J., ... & O'Connell, M. (2019). Carotid plaque inflammation imaged by 18F-fluorodeoxyglucose positron emission tomography and risk of early recurrent stroke. *Stroke*, 50(7), 1766-1773.
- Leknes, S., & Tracey, I. (2008). A common neurobiology for pain and pleasure. *Nature Reviews Neuroscience*, 9(4), 314-320.
- Luciani, M., Cecchini, M., Altavilla, D., Palumbo, L., Aceto, P., Ruggeri, G., ... E Lai, C. (2014). Neural correlate of the projection of mental states on the non-structured visual stimuli. *Neuroscience letters*, 573, 24-29.

- Moccia, L., Mazza, M., Nicola, M. D., & Janiri, L. (2018). The experience of pleasure: a perspective between neuroscience and psychoanalysis. *Frontiers in human neuroscience*, 12, 359.
- Panksepp, J. (2003). At the interface of the affective, behavioral, and cognitive neurosciences: Decoding the emotional feelings of the brain. *Brain and cognition*, 52(1), 4-14.
- Panksepp, J. (2013). Affective neuroscience. *Healing moments in psychotherapy*, 169-193.
- Panksepp, J. (2015). The neuroevolutionary sources of mind: The ancestral constitution of affective consciousness and the core-SELF. In *The constitution of phenomenal consciousness* (pp. 226-259). John Benjamins Publishing Company.
- Rizq, R. (2023). What the Butler Never Said: Psychoanalysis and Knowledge in Kazuo Ishiguro's *The Remains of the Day*. *British Journal of Psychotherapy*, 39(4), 751-764.
- Salone, A., Di Giacinto, A., Lai, C., De Berardis, D., Iasevoli, F., Fornaro, M., ... & Giannantonio, M. D. (2016). The interface between neuroscience and neuro-psychoanalysis: focus on brain connectivity. *Frontiers in human neuroscience*, 10, 20.
- Tretter, F., & Löffler-Stastka, H. (2018). Steps toward an integrative clinical systems psychology. *Frontiers in Psychology*, 9, 1616.