Network Models of Trauma: Probabilistic Inference in Narrative Collapse and Recovery as Dimensional Reconstruction.

An Interdisciplinary Analysis of Testimonies from the Independent Inquiry into Child Sexual Abuse, 2022.

Christopher E Stacey, 2025

Abstract

This study examines survivor testimony from the Independent Inquiry into Child Sexual Abuse (Brown et al., 2020), conceptualising childhood sexual abuse (CSA) trauma as a probabilistic symbolic disruption to interconnected neural, symbolic and relational systems. Testimonial disfluencies, evidenced in disrupted temporality, narrative omission, metaphorical substitution and affective distortion were linked to altered functional connectivity across the default mode, salience, and central executive networks, co-occurring with disruption in socio-symbolic and relational ecologies.

An interdisciplinary framework integrated network and system neuroscience, connectionist models, Bayesian predictive processing, quantum cognition and narrative–symbolic theory, situating autobiographical memory as a distributed, dynamic system. Within this system, contradictory self-states and fragmented recall were interpreted as probabilistic symbolic processes mediated by relational and cultural contexts. Bayesian and network analyses positioned posttraumatic stress disorder symptom interdependence, while small-world and scale-free models demonstrated how trauma disrupts neural and socio-discursive integration.

Findings supported a neural symbolic recovery model in which coherence emerges through iterative re-symbolisation, narrative reconstruction, and survivor-led meaning-making, consistent with phase-oriented and narrative therapy models. CSA trauma was viewed not as a categorical disorder but as a systemic disruption situated within distributed networks of meaning and power. The study recommends pluralistic, trauma-informed organisational models that position agency, trust and cultural responsiveness within survivor-centred systems, integrating neurocognitive, linguistic and symbolic dimensions of recovery.

2.0 Prologue

"When the image is new, the world is new."

(Bachelard, 1958)

"Realism is perhaps the least adequate means of understanding or portraying the incredible realities of our existence." **(Le Guin, 2018)**

"...[Cabeza de Vaca] ceased to be lost not by returning but by turning into something else."

(Solnit*, 2006)*

"This then, I thought, as I looked round about me, is the representation of history. It requires a falsification of perspective. We, the survivors, see everything from above, see everything at once, and still we do not know how it was."

(Sebald, 1998)

2.1 Introduction

Childhood sexual abuse (CSA) is a profoundly destabilising and insidious issue with globally relevant long-term psychological, relational, and epistemic consequences. In England and Wales, 1 in 6 girls and 1 in 20 boys are estimated to experience sexual abuse before the age of 16, with approximately 3.1 million adults estimated to have experienced CSA (IICSA, 2022; Office for National Statistics, 2020). The Truth Project, part of the Independent Inquiry into Child Sexual Abuse (IICSA), provides a unique dataset of collective trauma narratives that disrupt normative assumptions about memory, identity, and justice.

The World Health Organisation (WHO) defines child sexual abuse as involving a child in sexual activity they do not understand, cannot consent to, or are developmentally unprepared for, often within relationships of trust or authority (WHO, 1999).

In this study, the term trauma is employed as a conceptual shorthand and heuristic device to delineate the domain of inquiry understood as psychological trauma. The correlation between trauma and PTSD (Post-Traumatic Stress Disorder) is strong but not deterministic (Breslau et al., 1998; Kilpatrick et al., 2013); while trauma is a necessary condition for presentation of PTSD, it is not sufficient on its own. However, their correlation is statistically significant and clinically robust (Harris et al., 2024; Lanius et al., 2010; Yehuda et al., 2015), mediated by individual, social and contextual factors and are therefore assumed in this study. The term testimony here is used to signify discursively constructed narrative acts, the term functioning as a shorthand for the broader relational, affective and epistemic process through which meaning is made in the aftermath of trauma [3.3.1; 7.1–7.9.1].

2.2 Background and Rationale

The scope of this study's analysis is limited to the Truth Project Thematic Report Child sexual abuse in the context of schools (Brown et al., 2020), which serves as the primary data source, while incorporating data from the IICSA Final Report (Jay et al., 2022). A wider body of survivor narratives archived in the Truth Project and institutional findings from the remaining eighteen reports in the Independent Inquiry into Child Sexual Abuse (IICSA) between 2016 and 2020, contextualise and inform the theoretical framing and interpretive perspective of this inquiry.

Based on relational ontology, this analysis interprets experience and testimony of CSA trauma as non-linear, non-positional and can be described as complex nodes in systems of internal dynamics, and not as dominant cognitive positions [3.1; 7.7]. In this model, narrative coherence is recovered across multiple interdependent networks of affective, linguistic, cognitive, and neurobiological fields.

This study proposes a connectionist approach; describing CSA trauma as pluralistic disruptions apparent as narrative and cognitive collapse, seen not as pathologised or clinical deficits but as interruptions in networked representational, neurocognitive and affective coherence within structured probabilistic models and distributed neural representations (Abbott et al., 2013; Taylor et al., 2011) [3.3.2; 7.1; 7.3]. These states are reframed within a relational ontology and networked frameworks, positioning trauma not as individual dysfunction, but as emergent from dysregulated symbolic ecologies and fragmented intersubjective networks. This study therefore suggests trauma can be modelled in two interdependent ways: first, as a failure within probabilistic inference [3.2.1; 7.2]; second, as a disruption of symbolic and intersubjective coherence [3.3.3; 7.5–7.6].

This research examines how survivors of CSA construct autobiographical narratives, proposing that trauma creates quantum-symbolic disruption [3.4.3; 7.2; 7.8] that requires symbolic and spatial forms of reintegration. Individual schisms of memory remain disordered and resistant to integration, impeding the emergence of coherent narrative and obstructing plasticity of autobiographical experience (Vanderveren et al., 2017). This breakdown in symbolic and temporal organisation compromises the narrative matrix necessary for meaning-making and self-continuity (Caruth, 1997; Conway & Pleydell-Pearce, 2000), resulting in narratives characterised by fragmentation, repetition, and deteriorating discourse (Ehlers & Clark, 2000; Herman, 1992). Interpretation, processing and recovery from instances of CSA trauma are examined in this study, using plural, dimensional understandings of trauma, including network and quantum models of symbolic collapse and narrative reconstruction [7.1–7.9.1; 8.2–8.3].

This study conceptualises trauma as a collapse within interrelational systems of neurological, affective and relational networks. Bayesian approaches cite the brain as a rational system for integrating uncertain information and generating predictions. This model describes narrative disruption as a breakdown in the brain's ability to apply prior knowledge to new emotional events, where trauma destabilises expectations and disrupts perceptual inference (O'Reilly et al., 2012). Within this framework, Bayesian inference is interpreted within quantum dynamics, where narrative perception becomes contextualised and collapses into situational, emergent events of meaning (Hameroff, 2013; Mistry et al., 2015). Parallel Distributed Processing (PDP) models suggest that cognition emerges from interactions of discrete processing units (McClelland, 1988; Rogers & McClelland, 2014) in patterns of activation across distributed networks, conceptualising CSA trauma as defracted processes disrupting experience, meaning, and identity into multiple, interrelated pathways [3.5; 7.2].

It therefore proposes a four-dimensional framework for understanding how CSA trauma induces systemic collapse. First, trauma disrupts temporal coherence, disrupting autobiographical continuity and resulting in dissociation, recursion, and narrative absence (Caruth, 1996; Goldsmith et al., 2004; Herman, 1992; Laub, 1995) [7.4]. Second, it disrupts networked integration within brain function and language, producing altered connectivity [3.4.2; 7.2] in the hippocampus, amygdala, and default mode network (Patel et al., 2012; Haris et al., 2023), causing relational and discursive disruption (Barabási, 2003; Latour, 2005) [7.1; 7.3]. Third, trauma impairs probabilistic-symbolic processing, disrupting Bayesian prediction and semantic cohesion, resulting in disordered cognitive-affective states modelled by quantum cognition and contextual interference (Busemeyer & Bruza, 2012; Friston, 2010; Pothos & Busemeyer, 2022; Uzan, 2023) [7.2; 7.5–7.6]. Finally, trauma initiates collapse within a relational-ontological dimension, where meaning, memory, and selfhood no longer emerge from positional legitimacy but as both autonomous and interdependent, reflexively open and socially embedded (Bohm, 1980; Bulgakov, 2008; Flender, 2011; Rovelli, 1996; Tsekeris, 2015; Vass, 2015) [7.7–7.9].

These disruptions can be described in models of quantum superposition and collapse, where contradictory and incomplete meaning contextually collapse into expression (Aerts, 2008; Aerts & Sozzo, 2012) [7.2; 8.3]. This framework provides an epistemological basis for interpreting disfluent trauma testimony as structurally coherent within a quantum-symbolic paradigm. These models provide a mechanistic explanation for trauma symptoms, suggesting that altered predictive mechanisms contribute to the development and maintenance of PTSD and C-PTSD [3.2.1; 7.2]. This framework provides new perspectives on trauma effects and potential interventions for recalibrating the predictive processing system [8.2–8.3].

This study therefore models trauma in two interdependent ways: first, as a failure within probabilistic inference; second, as a disruption of symbolic and intersubjective coherence; both of which inform the six thematic codes [7.1–7.9.1] and the integrated recovery models [8.2–8.3] situated within institutional contexts of betrayal and systemic silencing [7.9.1–7.9.2].

2.3 Philosophical and Theoretical Positionality

This study adopts a critical realist and post-constructivist position, recognising that while CSA has material and neurobiological effects, these are mediated through symbolic, relational, and discursive systems (Bhaskar, 2008; Guba & Lincoln, 1994). Trauma is therefore understood as a distributed systemic disruption across neural, symbolic, and social domains (Busemeyer & Wang, 2018; Herman, 1992; Latour, 2005) [3.2–3.3].

To model these dynamics, the study employs network and system theories, quantum cognition [3.4.3; 7.2], symbolic-linguistic analysis [3.3.3; 7.5], uncertainty and predictive principles and relational ontology [3.1] positioning testimony as structurally coherent within symbolic–probabilistic frameworks. This framing is further informed by small network and actor-network theories [7.3] and narrative phenomenology [3.3.1; 7.4], approaching testimony as both discursive and material practice, where identity, memory, and meaning emerge dynamically within relational–symbolic ecologies.

This study situates trauma within therapeutic and institutional ecologies through clinical models that support narrative and symbolic coherence [7.8–8.3]. Trauma is conceptualised in terms of disrupted connectivity expressed as testimonial incoherence while emphasising contextuality, indeterminacy and dynamic reconstruction [3.4.2; 7.2]. Classical cognitive models premised on linearity, monotonic logic and fixed representational memory are contrasted with quantum approaches that articulate

contextuality, indeterminacy, and reconstructive dynamics [3.4.3.3]. Testimony is therefore approached phenomenologically, as both discursive and embodied practice, evident in disfluencies that position testimonial collapse within broader ecologies of institutional betrayal, systemic silencing, and collective complicity [7.9.1–7.9.2].

2.4 Aims and Research Questions

This research interrogates how CSA survivors narrate and reintegrate trauma through fragmented, symbolic, and dynamic autobiographical processes, using connectionist, network and quantum cognitive models. It examines whether such models can reframe autobiographical disruption and inform survivor-led methodologies for narrative reconstruction. The central research question is: Can connectionist and quantum models reframe autobiographical disruption?

The study positions trauma-related testimonial incoherence as an adaptive expression of systemic disruption across neural, symbolic, and socio-relational networks [3.3.1; 7.1–7.9.1] and not as a deficit. It applies Reflexive Thematic Analysis to survivor accounts from the Truth Project Thematic Report: Child sexual abuse in the context of schools (Brown et al., 2020), supplemented by interpretive insights from the IICSA Final Report (Jay et al., 2022), generating six thematic codes: narrative disjunction [7.4], metaphorical function and symbolic disruption [7.5], ontological breakdown and affective incoherence [7.7], networked agency and systemic rupture [7.6], predictive–quantum inference and epistemic instability [7.2] and autobiographical reconstruction and narrative repair [7.8].

Findings are interpreted through a four-dimensional trauma framework [2.2], integrating temporal disruption [7.4], networked integration failure [7.1; 7.3], probabilistic-symbolic breakdown [7.2; 7.5–7.6], and relational-ontological collapse [7.7–7.9.1]. The research also engages with ontogenetic perspectives on disclosure (Alaggia, 2019; Collin-Vézina

& Lateef, 2019) and socio-ecological barriers that frequently delay disclosure until adulthood (Hunter, 2011), demonstrating the need for dialogical and context-sensitive frameworks for narrative repair.

3.0 Literature Review

3.1 Ontology: Trauma, Identity, and the Self

This study conceptualises trauma as an ontological rupture in complex adaptive systems of neural, symbolic, relational and temporal coherence [2.3; 7.1; 8.1]. Situated within a relational ontological framework, the self is understood as instantiated through interdependent networks of these processes [3.4.1; 7.6].

Childhood trauma can impair autobiographical memory, resulting in overgeneral memory (OGM) retrieval and loss of contextual specificity (Hakamata et al., 2021) [3.4.3; 7.4]. Findings suggest that trauma influences OGM via altered cortisol secretion and brain connectivity, with blunted basal cortisol levels, executive control deficits (Sumner, 2012) and increased prefrontal–extrastriate connectivity mediating the relationship between childhood trauma and semantic-associate memory retrieval (Hakamata et al., 2021) and can predict affective symptoms in CSA survivors (Burnside et al., 2004; Hitchcock et al., 2014). This connectivity may exacerbate OGM by reinforcing semantic associations over contextual details, reducing specificity in autobiographical recall. In adult survivors of CSA, symptom network analysis shows self-blame, guilt and relational disturbance as central, suggesting testimonial incoherence reflects affective–cognitive collapse rather than discrete memory failure (McBride et al., 2019; McNally et al., 2017) [7.4, 7.7]. This is compounded by the collapse of the specious present (Husserl, 1991; James, 1890/1950; Varela, 1999); in which intrusive “nowness” collapses temporal distance [7.4], fragmenting autobiographical coherence (Herman, 1992; Stolorow, 2016). Peritraumatic

dissociation is in turn, adaptive in acute threat and becomes maladaptive when prolonged (Bedard-Gilligan & Zoellner, 2012), with cumulative neurobiological and narrative dysregulation disrupting memory, affect regulation and identity (Noll et al., 2023). Trauma undermines symbolic systems that sustain identity narratives, producing temporal incoherence and narrative fragmentation (Caruth, 1997; Meretoja, 2014) [7.4; 8.3].

In this ecology, testimony functions as reconstruction (Tummons, 2020; Herman, 1992; van der Kolk, 2014) [7.8; 8.4] by extending the temporal field and restoring continuity across fragmented experience (Meretoja, 2014). Diagnosis and identity are co-produced through narrative practice (Fraas, 2015) and can be repaired via affective and symbolic integration (Brison, 2002; Conway & Pleydell-Pleydell, 2000; Crossley, 2000; Draucker & Martsolf, 2008; Truskauskaite-Kuneviciene et al., 2020) [7.8; 8.2]. Schema theory provides a cognitive basis for this disruption: trauma destabilises core schemas governing identity and memory, resulting in symbolic disorientation and fragmented recollection (Brewin et al., 1996; Capella, 2016; Ehlers & Clark, 2000; Janoff-Bulman, 1992; Saha et al., 2011) [3.2.1; 7.4].

Trauma disrupts the structural conditions necessary for identity formation (Schore, 2009; Stolorow, 2003), producing dislocation in the relational, symbolic and temporal dimensions of selfhood [3.3; 7.4]. It simultaneously destabilises the discursive apparatus of subjectivity, degrading boundaries between signifier and signified (Anker, 2009; Bonomi, 2004; Peckham, 2023) [3.3; 7.5]. This collapse destabilises meaning and narrative coherence (Barad, 2007; Di Biagio & Rovelli, 2020; Hübl, 2022; Jabri, 2023; Matoba, 2020; Wildman, 2023; Wilson & Lindy, 2013) [7.7; 8.3]. Schema theory provides a cognitive basis for this disruption: trauma destabilises core schemas governing identity and memory, resulting in symbolic disorientation and fragmented recollection (Brewin et al., 1996; Capella, 2016; Ehlers & Clark, 2000; Janoff-Bulman, 1992; Saha et

al., 2011) [3.2.1; 7.4].

Neuroplasticity supports post-traumatic reconstruction by enabling narrative and symbolic reorganisation (Hayes et al., 2015; Overton, 2013; Pascual-Leone et al., 2005) [7.8; 8.2]. Dimensional reconstruction occurs through reintegration across neural, affective, symbolic and social systems, consistent with Actor-Network Theory (Latour, 2005) and symbolic individuation [7.1; 7.6]. Testimony becomes a performative enactment of becoming (Tummons, 2020), situated within ontological pluralism that recognises survivors as inhabiting multiple relational states co-constituted by narrative and symbolic fields (Meretoja, 2014) [7.8; 8.4]. Each narrative act is therefore an ontological and ethical event, demonstrating the need to understand the trauma–identity relationship for effective prevention and intervention strategies (Berman, 2016) [8.4].

3.2 Perception: Affective, Cognitive, and Neural Dynamics

Trauma disrupts the integration of sensory, emotional and temporal experiences, often producing dissociation and large-scale reorganisation of brain networks. Disruptions in the DMN, mPFC, amygdala and ACC inform emotion dysregulation and autobiographical fragmentation (Haris et al., 2023; Lanius et al., 2010; Patel et al., 2012). EEG and autonomic studies show reduced resting-state connectivity in complex PTSD and dissociative disorders, with post-treatment gains in emotion regulation corresponding to neural normalisation (Salami et al., 2021; Schlumpf et al., 2021). Connectome-based modelling identifies altered cortical–subcortical connectivity as predictive of symptom severity (Suo et al., 2020).

CSA-related trauma correlates with altered functional connectivity in the amygdala's basolateral and centromedial nuclei, disrupting salience detection and emotional regulation (Haris et al., 2023). Subcortical disruptions parallel large-scale alterations in

the hippocampus, medial prefrontal cortex and default mode network (Patel et al., 2012), structures critical for autobiographical memory and narrative continuity. Connectome-based approaches demonstrate that individualised PTSD symptom severity can be predicted from resting-state connectivity, particularly in circuits linking visual, limbic, subcortical-cerebellar and motor regions, while connectome-based modelling identifies altered cortical–subcortical connectivity as predictive of symptom severity (Bansal et al., 2019, Suo et al., 2020). PTSD symptom networks also replicate across trauma types and cultural contexts, clustering around hyperarousal, avoidance and intrusive symptoms (Fried et al., 2018).

Dimensional models of trauma, locating dissociative and trauma-related disorders as a continuum linked to trauma severity, emphasise fear and betrayal as orthogonal dimensions of traumatic harm (Freyd, 1996), with traumatic stress therefore seen as a distinct dimension within psychopathology, characterised by avoidance, dissociation, and intrusive memories (et al., 2022).These findings demonstrate narrative incoherence, disrupted sequential logic, and testimonial disjunction observed in prolonged interpersonal trauma (Bedard-Gilligan & Zoellner, 2017; Vanaken et al., 2021).

Traumatic events impair both the consolidation and regulation of emotion, distorting memory structure and recall (Bedard-Gilligan et al., 2017; Pessoa, 2025). Heightened affective activation strongly influences the accessibility and fragmentation of traumatic memory, particularly in dissociative disorders (Yates & Nasby, 1993), with dysregulation in the SN and ECN contributing to avoidant processing, diminished cognitive control and reduced narrative agency (Menon, 2011; Seeley et al., 2007; cf. 7.1). Resilience determinants such as preserved network connectivity (Brunetti et al., 2017) and access to collective narratives can mitigate these effects, while aspects remain un(re)presentable

(Khader, 2012) at an individual level.

Polyvagal Theory (Porges, 2011) supports this view by articulating autonomic regulation as a hierarchical system of ventral vagal, sympathetic and dorsal vagal; that informs perception, affect and cognition [3.2; 7.3]. Trauma dysregulates these systems (Schmahmann, 1998), inhibiting narrative coherence and symbolic integration (Dana, 2018) [3.3.4; 7.5] as dorsal vagal dominance during dissociation suppresses verbal output and interoceptive awareness, contributing to testimonial voids [7.4]. The SN acts as a neural correlate of polyvagal dynamics (Menon, 2011; Seeley et al., 2007), detecting threat cues and orchestrating autonomic responses. In CSA testimony, chronic SN hyperactivation reflects persistent neuroception of danger (Porges, 2011), biasing attention toward somatic and affective cues at the expense of coherent temporal sequencing [3.3.1; 3.4.2]. This bias reinforces symbolic collapse by privileging immediate survival-oriented representations over integrative autobiographical memory [3.4.3.2; 7.8].

Bayesian and predictive processing models [3.2.1; 7.2] conceptualise these effects as failures of predictive alignment between sensory input and prior beliefs. Trauma can distort priors, producing maladaptive inferential expectations and sensory precision deficits (Wilkinson et al., 2017). Neurocomputational analyses link dopamine-mediated prediction error and salience assignment to disrupted perceptual integration (Friston et al., 2014), explaining phenomena such as trauma-related misperception and testimonial incoherence.

3.2.1 Predictive Coding, Bayesian Inference, and Trauma

The Bayesian brain hypothesis models perception and cognition as hierarchical generative systems that continuously update internal priors to minimise prediction error and free energy (Friston, 2010, 2012; Knill & Pouget, 2004; Penny et al., 2013; Rao & Ballard,

1999). Predictive coding extends this framework by emphasising that prior expectations actively structure the interpretation of incoming sensory data, with predictive errors initiating model updating through error signals (Bastos et al., 2012; Friston et al., 2012). This account positions perception as a process of hypothesis testing in which saccades, attention, and inference are deployed to reduce uncertainty and situates perception, memory and action as emergent from probabilistic generative models (Clark, 2013; Hohwy, 2013). These processes are emergent from complex interactions and cannot be reduced to biological substrates or simple relational schemas. (Sawyer, 2002). Within trauma, predictive coding demonstrates that disrupted priors may determine hypervigilance, dissociation and fragmented recall, reflecting failures in hierarchical integration of sensory, affective and autobiographical information [7.2]. This updating process can be destabilised, leading to overweighted threat-related priors (Krupnik, 2020; Rosenblau et al., 2023) and rigid inferential loops that sustain hypervigilance, dissociation and avoidance [7.5; 7.4]. Severe trauma may collapse existing priors entirely, producing fragmented or inhibited predictive states, chronic prediction-error cycles and destabilised self-models (Friston, 2011) [7.5; 7.4]. Predictive processing (Kube et al., 2020; Wilkinson et al., 2017) interpret re-experiencing as the persistence of high-precision threat priors that override contradictory sensory evidence [7.4].

Bayesian inference therefore presents a computational explanation for testimonial incoherence, positioning it as a failure to reconcile contradictory priors and new evidence. Recovery involves belief revision, where fragmented experiences are re-encoded into coherent autobiographical models (Etz & Vandekerckhove, 2018; Kruschke, 2015; O'Reilly et al., 2012; Stappenbeck et al., 2023; van de Schoot et al., 2017). This process parallels memory reconsolidation and symbolic integration, reducing narrative uncertainty and restoring coherence [7.8; 8.2]. Dysregulation in the SN and ECN

contributes to avoidant processing, diminished cognitive control and reduced narrative agency (Menon, 2011; Seeley et al., 2007; Krohn et al., 2023). PTSD symptom networks show replicability across trauma types and cultural contexts (Benfer et al., 2018; Ben-Zion et al., 2025; Isvoranu et al., 2021; McFarlane et al., 2002)

Parallel Distributed Processing (PDP) models (McClelland, 1988; Rogers & McClelland, 2014) complement Bayesian accounts by modelling cognition as distributed activation patterns across interconnected units. Trauma weakens connection weights, producing representational holes in autobiographical memory (Abbott et al., 2013; Taylor et al., 2011). Recovery operates as adaptive epochs that reinstate associative links, supporting symbolic and semantic coherence [7.8; 3.4.1].

Dynamic Causal Modelling (DCM) identifies disruptions in effective connectivity between the default mode network (DMN), salience network (SN) and central executive network (CEN) in PTSD (Friston et al., 2011) analogous to narrative fragmentation, identity disruption, and affective dysregulation [7.6; 7.1; 8.3]. This distinction between correlation and causation underscores trauma as a breakdown in directional integration of self-referential and affect-regulatory systems.

Entropy-based accounts (Shahri, 2022) and the efficient coding hypothesis (Knill & Pouget, 2004; Friston, 2010) further explain why traumatic memories persist as dominant, high-salience events. Symbolic expression, narrative reconstruction and emotional regulation function as Bayesian entropy-reduction mechanisms, re-establishing coherence across neural, affective, and symbolic networks [8.2; 7.8].

3.3 Linguistic Relativity and Temporal Disruption

Trauma-related autobiographical disruption reflects both cognitive–affective collapse and

altered large-scale brain network function [2.2; 3.2; 7.4]. Overgeneral memory (OGM) retrieval is evident across psychiatric disorders, characterised by difficulty recalling specific autobiographical events (Barry et al., 2021; Hakamata et al., 2021). This cognitive vulnerability persists even in remitted affect, where individuals retrieve fewer specific and more categoric memories compared to those prior affective disturbance (Barry et al., 2021). OGM has been linked to poor working memory, as shown by associations between instruction recall and OGM performance (Yanes et al., 2008). While reduced memory specificity is important, other autobiographical features such as episodic detail, narrative themes and coherence are also relevant for psychopathology (Barry et al., 2022). These constructs are interrelated but distinct, with differential associations to depressive symptoms and other outcomes, suggesting that a narrow focus on specificity may overlook broader dimensions of autobiographical disruption (Barry et al., 2022). Dual Representation Theory (Brewin et al., 1996) distinguishes verbally accessible memories (VAM) from situationally accessible memories (SAM); trauma skews recall toward SAM dominance, contributing to the vivid yet disorganised qualities of flashbacks (see 7.8). Phenomenological accounts frame this as ontological rupture, where trauma interrupts the conditions for coherent self-narration (Stolorow, 2003; Crossley, 2000) [3.1; 7.4].

Neuroimaging links these disruptions to hypoactivity in the default mode network (DMN) and altered connectivity between DMN, salience (SN) and central executive (CEN) networks—patterns predictive of PTSD severity (Schlumpf et al., 2021; Chamberlin, 2019; McBride et al., 2019) [7.1; 7.2]. Connectome-based models show that narrative coherence correlates with integration across these networks (Suo et al., 2020) [8.3].

Trauma can significantly disrupt conceptual categories and metaphors available for

narrative reconstruction [7.5], limiting language (Wittgenstein, 1975) and narrowing the linguistic means through which memories are encoded and retrieved (Durham, 2020; Radstone, 2007; Whorf, 1956) [3.3.3; 7.5; 8.2]. This relationship between cognitive disruption and symbolic limitation reinforces testimonial gaps and semantic disjunction (Shotter, 1993). Testimonial language functions as direct representation and as a semiotic system, where meaning is displaced, deferred, or coded through metaphor and substitution (Barthes, 1977; Culler, 1982; Derrida, 1976; Evans, 1996; Lacan, 2006) in domains of absence, presence, and temporality (Wike, 2004). Testimony then functions as reconstruction, re-symbolisation (Tummons, 2020) [7.9] and reintegration of processes and beliefs necessary for language (Wittgenstein, 1969), enabling survivors to re-sequence events within broader autobiographical structure. However, external invalidation can reinforce dissociation and narrative instability (Bedard-Gilligan & Zoellner, 2012) [7.6; 7.9].

3.3.1 Networked Systems: Social, Neural, and Discursive

Trauma disrupts interconnected neural, social and symbolic systems [2.2; 3.2; 7.1–7.3; 8.2]. Actor–Network Theory (ANT) and assemblage theory frame CSA harm as emerging from distributed human and non-human networks—perpetrators, institutions, discourses, and silences—rather than from interpersonal events alone (Latour, 2005; Deleuze & Guattari, 1987) [7.3; 7.6]. This distributed agency parallels small-world network organisation in the brain, where optimal functioning balances short-range clustering and long-range integration (Watts & Strogatz, 1998; Barabási, 2003).

Evidence shows trauma-related disruption of DMN–SN–CEN coordination (Akiki et al., 2017; Zhao et al., 2021) and altered small-world properties (Bassett & Bullmore, 2006; Bouffanais, 2016), consistent with the network breakdowns described in [3.2; 7.1; 7.2].

Hyperconnectivity after injury (Hillary & Grafman, 2017) may offer short-term adaptation but risks chronic hub stress, while resilient survivors display adaptive network decorrelation supporting metaphorical integration (James et al., 2013) [7.5; 7.6]. If information is physical (Landauer, 1961), then changes in neural connectivity reconstruct autobiographical recall, with testimony acting as translation of physically instantiated traces into symbolic language (Dor, 2015). Neural and linguistic systems share principles that balance segregation and integration (Zamora-López et al., 2011), mediating the transformation of these traces into narrative form. Disruption of autobiographical/self-referential networks impairs narrative continuity, explaining reliance on metaphor as reparative tool (Lanius et al., 2020; Thome et al., 2019) [3.3.3; 7.5].

Trauma-related network breakdowns can be modelled as entropy increases within symbolic–neural systems (Collell & Fauquet, 2014; Landauer, 1991). Stochastic and information thermodynamics describe how changes in network connectivity affect inference, learning and memory storage (Karbowski, 2024), with entropy and negentropy providing quantitative measures of order and disorder (Lambrou et al., 2021). Thermodynamic computing approaches (Fry, 2017) propose that intelligent processes are inherently endothermic, reduce entropy, and require sustained energy input. In trauma, network disruption can thus be understood as disrupted, higher entropy [3.4.3.2]. These network disruptions also extend into socio-symbolic and institutional systems. Field Theory (Lewin, 1936, 1943) explains how breakdowns in the relational structure of a field undermine and restrict agentive capacity, intensifying testimonial fragmentation in contexts saturated by institutional power (Bourdieu, 1977, 1990) [3.4.3.2; 7.3; 7.6]. This aligns with complex network approaches where testimony is emergent from interrelated neural, discursive and socio-material systems [8.2; 8.3].

3.3.2 Linguistic Relativity and Bilingual Recall

The encoding and retrieval of traumatic memory are language-dependent, particularly in bilingual individuals who report heightened emotional salience, vividness and sensory detail when recalling trauma in their first language (L1) (Boroditsky, 2011; Schwanberg, 2010) [7.5; 7.6]. Trauma narratives expressed in L1 tend to evoke more intense PTSD symptomatology and richer autobiographical characteristics due to stronger cognitive–affective associations embedded in the primary linguistic system (Johnson, 1980; Lecercle, 1990). These findings support models of linguistic relativity, which propose that language shapes perception, memory and emotional processing (Lacan, 1977; Vygotsky, 1962; Whorf, 1956) [3.3; 7.4].

Language can function as an affective and distributional structure through metaphor, somatic experience and memory (Lecercle, 1990; Whorf, 1956) [7.5]. Bilingual trauma survivors' tendencies to retrieve more emotionally intense memories in L1 substantiate the theory that different languages offer varying affordances for encoding traumatic experience and facilitating recovery (Kövecses, 2005; Schwanberg, 2010). The cultural framing of trauma reinforces this variability: discursive and grammatical forms available within a given linguistic system shape how survivors construct coherent narratives (Caruth, 1996; Johnson, 1980; Lecercle, 1990) [7.4; 8.2].

Developmental psychology (Vygotsky, 1962, 1978), including defectology and the zone of proximal development (ZPD), demonstrates that linguistic mediation structures the emergence of self–other regulation and emotional development in trauma contexts (Blaustein, 2018; Bateman, 2016) [7.8] and is viewed as an emergent and dynamic system arising from the dialectical interaction of psychogenetic and sociogenetic factors (Karimi-Aghdam, 2017; Wertsch, 1984). Adapted to post-traumatic growth models, the ZPD

provides a framework for understanding how survivors internalise symbolic resources via relational regulation and linguistic reconstruction [8.3]. Trauma can rupture the semiotic–symbolic axis, destabilising reference and meaning (Kristeva, 1982), with full discussion of symbolic collapse and repair provided in [3.1; 3.3.3; 7.5–7.6].

3.3.3 Metaphor, Neurocognitive Integration, and Symbolic Repair

Poetic language, particularly metaphor, engages the Default Mode Network (DMN), limbic system and dopaminergic reward pathways, linking autobiographical memory with affective resonance (Citron, 2020; Jacobs, 2023; Liu et al., 2015) [7.5; 7.6]. Functional connectivity between Broca's and Wernicke's areas and emotion-related regions such as the amygdala and insula enables metaphor to integrate semantic and affective information (Doumit et al., 2013; van der Kolk, 2014), supporting affectively salient narrative processing (Chaudhuri, 2025; Jacobs, 2015) [3.2; 7.8].

Symbolic rupture following trauma often resists literal narration, prompting survivors to use metaphor, oblique expression and non-linear structure to convey unspeakable experiences (Gildea, 2018; Ricoeur, 2004) [7.4; 7.6]. Mind–brain interface models (Mindell, 2012) interpret testimonial disruption as failures in dynamic symbolic processing, linking neural collapse with narrative incoherence. Metaphor provides symbolic distance while enabling affective articulation, into generative metaphors that support narrative repair (Modell, 1997; Wilson & Lindy, 2013) [7.8].

Poetic imagery can precede logical structure, making metaphor a primary mode of trauma integration (Bachelard, 2014; Kaplan, 1972) [8.3], with image-schematic metaphors mediating somatic memory and narrative representation (Kövecses, 2005; Tay & Neimeyer, 2021) [7.5; 7.8; 8.3].

3.3.4 Linguistic Dysregulation, Neuroplasticity, and Metaphor

Trauma can suppress Broca's area activity, impairing syntactic sequencing and verbal encoding and disrupt Wernicke's area function for semantic processing, especially in dissociation and alexithymia (Joseph, 2018; Lanius et al., 2004) [7.5–7.6]. Functional disconnection between these regions and memory-related structures such as the mPFC and hippocampus undermines integration of linguistic, emotional and episodic systems, contributing to fragmented trauma narratives (Thome et al., 2019) [3.2; 7.4]. [7.8–7.9].

Metaphor functions as embodied affective integration, linking sensory–motor and conceptual systems to bridge pre-verbal trauma with symbolic narrative reconstruction (Lakoff & Johnson, 2003; Modell, 1997) [3.3.3; 7.8]. Foreclosed metaphors signify trauma-induced stasis, whereas generative metaphors enable symbolic transformation and post-traumatic growth (Wilson & Lindy, 2013) [7.5; 7.8].

Neuroplasticity across the DMN, SN and ECN reinforces recovery by supporting adaptive redistribution of autobiographical, executive and salience processes (Creswell et al., 2016); supporting symbolic and narrative reconfiguration after trauma (Hayes et al., 2015; Pascual-Leone et al., 2005) and restoring disrupted connections between semantic and affective systems (Chaudhuri, 2025; Gonzalez et al., 2019).

3.4 Networked Systems: Social, Neural, and Discursive

Trauma can be understood as a disruption within interconnected neural, social and symbolic networks [3.2; 7.1–7.3; 7.7.2], in which these processes function as autonomous yet interdependent nodes within emergent systems (Hogenson, 2004). Systems theory describes these as dynamic, self-organising wholes in which cognitive, somatic and ecological domains interact through feedback loops and non-linear processes (Capra &

Luisi, 2014; von Bertalanffy, 1968). In this view, CSA trauma is not reducible to discrete pathology but must be situated in broader ecological contexts, where relational, neural and cultural subsystems co-regulate or destabilise one another.

This neural–symbolic interdependence aligns with Field Theory, B = f(P, E) (Lewin, 1936, 1943), which conceptualises behaviour within dynamic fields in which collective systems self-organise or fragment depending on connectivity and feedback dynamics (Bouffanais, 2016; Köhler, 1947) [7.3; 7.4].

Recovery involves re-establishing adaptive connections across neural, narrative and socio-material domains, supporting more resilient and plural identities [7.8–7.9; 7.7.2] Testimony thus becomes a relational product of disrupted neural connectivity, symbolic mediation and institutional configurations [3.1; 7.1; 7.4; 7.7–7.9; 8.2; 8.4].

3.4.1 Narrative Disjunction and Distributed Testimony

Trauma narratives often exhibit fragmented temporality, testimonial disfluency, and affective incoherence, reflecting disruption in autobiographical memory and identity construction (Brison, 2002; Crossley, 2000; McAdams, 1993) [7.4; 7.8]. Actor–Network Theory (ANT) and relational agency frame testimony as an emergent property of interconnected social, neural and symbolic networks (Latour, 2005; Törrönen, 2001) [3.3.1; 7.3].

Network approaches, including ANT, rhizomatic models and small-world theory, show how meaning emerges from distributed, non-hierarchical systems (Barabási, 2002; Deleuze & Guattari, 1987; Watts & Strogatz, 1998) [7.7]. Recent findings demonstrate dissociation corresponds with disrupted integration across limbic–prefrontal networks

(Cao et al., 2025; Lebois et al., 2022; Pittella, 2024)

Complex systems models of PTSD (Borsboom & Cramer, 2013; Isvoranu et al., 2021) and connectome studies (Ben-Zion et al., 2025; Brunetti et al., 2017) show symptom patterns emerging from dynamic network disruptions, consistent with predictive coding accounts of quantum-symbolic disruption [3.2.1; 7.2]. Quantum–relational perspectives (Aerts & Beltran, 2021) conceptualise disrupted memory as probabilistic, with retrieval dependent on contextual cues and relational entanglement [7.6; 7.8]. Symbolic collapse models (Germann, 2019; Hameroff & Penrose, 2014) position testimony as a reparative act of networked reconstruction, described by narrative therapy principles (White & Epston, 1990) and deterritorialised meaning-making (Ingold, 2021) [7.5–7.6]. ANT and AIME frameworks (Latour, 2013; Tummons, 2020) conceptualise testimonial agency as emergent from neural, cultural and institutional systems and integrative recovery models [7.1–7.3; 7.8–7.9].

3.4.2 Triple Network Model (DMN, CEN, SN)

The Triple Network Model of Default Mode Network (DMN), Central Executive Network (CEN) and Salience Network (SN) describes a system-level understanding of disruption in cognition, affect regulation and autobiographical integration (Chamberlin, 2019; Menon, 2011) [3.2; 7.1; 7.2]. Trauma dysregulates network balance [3.2; 3.3.1], with DMN hyperactivity in PTSD and dissociation relating to temporal collapse and fragmented self-representation (Lebois et al., 2022) [7.4; 7.8], while CEN hypoactivation impairs cognitive control and goal-directed narrative organisation (Liu et al., 2017).

The SN's role in mediating DMN–CEN switching becomes compromised, with hyperactivation amplifying threat sensitivity, emotional flooding and dissociative states (Seeley et al., 2007) [7.6]. This over-weighting of salience disrupts both temporal

sequencing and symbolic coherence, reinforcing testimonial incoherence and narrative disjunction [2.2; 7.4].

Neuroimaging reveals reduced cross-network connectivity, predicting PTSD symptom severity (Liu et al., 2017). The Network Balance Model explains these effects as SN dominance over mnemonic and executive processes, producing maladaptive encoding and retrieval [7.2; 7.8]. Under predictive coding accounts [3.2.1], such bias reflects maladaptive precision-weighting toward danger-related cues, consistent with the quantum-symbolic disruption framework that informs both the eight thematic codes [7.1–7.8] and the systemic recovery models [7.8–7.9].

3.4.3 Quantum Cognition and Narrative Collapse

Quantum models of cognition provide a framework for understanding trauma-induced quantum-symbolic disruption in CSA survivor testimony, where coherence, symbolic association and autobiographical continuity are disrupted (Busemeyer & Wang, 2018; Caruth, 1997; Conway & Pleydell-Pearce, 2000; van der Kolk, 2014) [2.2; 7.2; 7.8]. Such breakdowns sustain dissociative cycles and impede integration (Ehlers & Clark, 2000; Herman, 1992), producing epistemic fractures across cognitive, cultural and linguistic systems (Brison, 2002; Laub & Felman, 1992) [7.4; 7.6] in quantum-chaotic models of dissociation (De Benedittis, 2020).

Quantum interference patterns conceptualise these disruptions as superposition states that collapse into singular narratives during articulation [7.2; 7.4]. Disfluency and metaphorical distortion act as interference or cancellation effects between competing narratives (Hameroff & Penrose, 2014; Lakoff & Johnson, 2003) [7.5; 7.6]. This distinction reflects a quantum symbolic layer of cognition (Aerts & Sozzo, 2012), where cognitive functioning operates simultaneously across classical and quantum conceptual

levels and testimonial incoherence arising from context-dependent collapse. Instability can arise from interference during encoding and recall, especially with impaired attentional control, producing violations of classical logic consistent with quantum non-monotonicity (Busemeyer & Wang, 2018). Integrated Information Theory (IIT) conceptualises consciousness as arising from informational complexity and network interconnectivity (Koch, 2013), suggesting that trauma fragments conscious experience by reducing integrative capacity across symbolic–neural systems.

Disruption of prefrontal–subcortical fluctuations essential for symbolic and narrative coherence (Helfrich & Knight, 2016) diffract trauma through contextualised symbolic enactments (Barad, 2007) [3.3.3; 7.5]. This aligns with the predictive coding and Bayesian updating failures described in [3.2.1], the thematic codes [7.1–7.8] and the integrated recovery models outlined in [7.8–7.9].

3.4.3.1 Quantum and Symbolic Modelling of Trauma and Testimonial Interference

Superposition narratives collapse into context-specific expressions during testimony (Busemeyer & Wang, 2018; Penrose & Hameroff, 2014) [2.2; 7.2; 7.4]. Disfluency reflects symbolic interference, where semantically entangled elements amplify or cancel (Lakoff & Johnson, 2003) [7.5; 7.6]. Relational Quantum Dynamics reframes trauma as disruption in entangled symbolic networks (Zaghi, 2024), with variability emerging from contextually dependent retrieval (Busemeyer & Wang, 2018) [3.3.3; 7.8]. This framework aligns with quantum-relational approaches to consciousness and identity (Di Biagio & Rovelli, 2020; Matoba, 2020; Rovelli, 1996) which view selfhood as emerging contextually and co-dependently [3.4.3; 7.2].

Memory reconsolidation interference (Kredlow et al., 2015) and Structured Event Memory theory (Franklin et al., 2020) describe recall as probabilistic reconstruction,

vulnerable to affective and contextual modulation [3.2.1; 7.2]. This supports a dual-layer cognitive model of dominative disruption under uncertainty. Bayesian–quantum integration in turn models how uncertainty disrupts classical reasoning, requiring meaning to emerge through contextual collapse (Hameroff, 2013; Smith, 2025) [7.2; 7.8–7.9]. Narrative coherence therefore emerges through symbolic collapse, analogous to Orch-OR reduction, where multiple meanings resolve into verbal representation (Hameroff & Penrose, 2014).

3.4.3.2 Symbolic-Cognitive Architectures and Memory

Symbolic breakdown in CSA narratives can be modelled within quantum-symbolic architectures, where autobiographical incoherence emerges from entangled disruptions in linguistic, neural and affective systems (Caruth, 1997; van der Kolk, 2014). In this framework, Orch-OR conceptualises symbolic collapse as the failure of coherent reduction from multiple potential meanings into stable narrative representation (Germann, 2019; Hameroff & Penrose, 2014), building on the broader account of autobiographical disruption in [3.3] and [3.4.1].

Metaphor formation under these conditions can be understood as a quantum interference process, where competing semantic vectors amplify or cancel during retrieval (Aerts & Sozzo, 2012), reintegrating fragments through reconsolidation pathways (Kredlow et al., 2015) [3.3.3–3.3.4].

Relational Quantum Dynamics (Zaghi, 2024) and entropy-based information models (Gassab et al., 2025) theorise consciousness as emerging from quantum-symbolic fields. Agential realism (Barad, 2007) positions testimony as co-produced in survivor–listener interaction, where displaced signifiers or silence mark unclaimed experience (Caruth, 1997). Computational narrative models (Fraas, 2015; Jirek, 2016; Leeming, 2013) and

predictive–quantum simulations (Widdows, Pothos, & Rani, 2023) support a non-pathologising view of testimonial incoherence as emergent from symbolic entropy, contextual uncertainty, and quantum-cognitive dynamics [7.2; 7.5–7.6].

3.4.3.3 Classical vs Quantum Narrative Models

Classical cognitive models assume linearity, stability and rational progression, treating memory as fixed and hierarchical (Boole, 1847; Evans, 2003; Osherson, 1981) [2.2]. Probabilistic and quantum models, however describe contextuality and superposition, with autobiographical memory mediated by retrieval conditions and cognition as non-linear and non-monotonic (Busemeyer & Wang, 2018) [7.2; 7.8]. Time, and therefore narrative, is seen as emergent and relational [2.2; 7.4].

Causal Set Theory (Bombelli et al., 1987; Sorkin, 1991) conceptualises experience as discrete, causally ordered events, with each trauma memory functioning as an irreducible node of experience. Trauma disrupts linear sequencing but preserves causal entanglement, so narrative identity emerges from ordered yet non-linear structures consistent with relational and symbolic models of selfhood [3.1; 7.7–7.8]. Memory is thus continually reconstructed across transitional symbolic and temporal networks, demonstrated in the distributed recovery models outlined in [7.1–7.8] and the integrated recovery models presented in the Conclusion [8.2–8.3].

3.5 Reconsolidation and Interference Dynamics

Dynamic network models link PTSD to altered metastability (Corredor et al., 2023), in computational approaches such as the Kuramoto model applied to psychiatric conditions (Anyaeji et al., 2021) [3.4.1–3.4.2; 7.2]. Biocultural (Reis & Ortega, 2021) and biopsychosocial models (Calhoun et al., 2022) extend this by integrating neurobiological,

relational and cultural dynamics, supporting multidisciplinary accounts of trauma [2.2; 3.3.1; 7.1–7.3; 8.2]. Structured Event Memory (SEM) theory (Franklin et al., 2020) and dual-process models extend this view by modelling recall as probabilistic recombination of vector–symbolic schemas, showing how fragments of experience are reconstructed dynamically rather than retrieved as fixed representations.

Memory reconsolidation research shows that new affectively salient learning can interfere with trauma recall, particularly when emotional valence [3.4] matches the original trauma (Kredlow & Otto, 2015). This supports quantum-interference models (Atmanspacher, 2004; Busemeyer & Wang, 2018), where competing affective trajectories collapse into altered recall states [3.4.3.1–3.4.3.2; 7.2]. These findings support the view that trauma narratives are dynamic and reconstructive, mediated by context, linguistic structure and symbolic framing [3.3.2–3.3.3; 7.5–7.6].

Testimonial incoherence is therefore not deficit but system-level evidence of affective, temporal and symbolic disintegration across entangled neural, symbolic and social systems [2.2; 3.4.1–3.4.2; 7.4–7.8]. This perspective has direct implications for trauma-informed narrative reconstruction, where interventions engage both reconsolidation mechanisms and symbolic repair [7.1–7.8; 8.2–8.3].

3.5.1 Predictive Network Models of Trauma

Predictive coding models conceptualise the brain as a hierarchical Bayesian inference system that continuously generates predictions and updates them to minimise prediction error (Friston, 2010; Knill & Pouget, 2004; Rao & Ballard, 1999). Under trauma, this coding process is destabilised, producing irreducible uncertainty in predictive–network disruption (Heisenberg, 1927; Bruza & Busemeyer, 2012; Pothos & Busemeyer, 2022) [3.3.1; 7.2]. The precision-weighting of prediction errors therefore becomes maladaptive:

hypervigilance overweights threat-related signals while underweighting benign input, reinforcing maladaptive priors (Peters et al., 2017; van den Bergh et al., 2017). The Free Energy Principle (Friston, 2010, 2011) conceptualises this as a failure to minimise formal measures of surprise, due to persistent dissonance between sensory input and traumatised internal models.

This produces chronic allostatic load and rigid narrative schemas. In autobiographical recall, this manifests as symbolic prediction failure, where new input cannot be assimilated into the existing model, leading to testimonial fragmentation and symbolic collapse [3.3.4; 7.4]. From a network perspective, predictive coding failure aligns with Triple Network disruptions [3.4.2] [7.5–7.6]. Recovery may therefore require restoring autonomic flexibility through narrative reconstruction and updating maladaptive priors, supporting reintegration of DMN, CEN and SN into a coherent autobiographical and symbolic networks [7.2; 8.2–8.3].

4.0 Methodology

4.1 Design: Reflexive Thematic Analysis within a Mixed Methods Framework

Reflexive Thematic Analysis (Braun & Clarke, 2019) was employed to interpret the non-linear, affective and symbolic complexity of CSA trauma narratives [2.2; 3.3–3.5; 7.1–7.8]. This method supported the iterative identification of themes through recursive engagement with the data, aligning with the study's focus on narrative disjunction, metaphor, symbolic collapse, network agency, quantum inference patterns, temporal–ontological rupture, autobiographical reconstruction and multiple network disruption [7.1–7.8; 8.2–8.3].

Although qualitatively situated, the study acknowledges the institutional design and

ethical oversight of the Truth Project, which integrated both quantitative and qualitative methods [2.2; 8.4]. Quantitative data from 691 school-based accounts were compared with non-school-related accounts to identify patterns, commonalities and divergences (Brown et al., 2020), situating the qualitative findings within the broader dataset [8.2].

4.2 Data Inclusion Criteria

Testimonies were selected for the presence of metaphorical, symbolic, or reflective language, particularly in relation to memory, identity and meaning [3.3.2–3.3.4; 7.5–7.8]. This ensured alignment with the study's six thematic codes: narrative disjunction and temporal collapse [7.4]; metaphor, symbolic mediation and collapse [7.5]; ontological breakdown and affective incoherence [7.7]; networked agency and systemic rupture [7.6]; predictive–quantum inference and epistemic instability [7.2]; and autobiographical reconstruction and narrative repair [7.8].”Although not statistically representative, these accounts provided thematically rich data for interpretive and network-informed analysis [3.3.2–3.3.4; 8.2–8.3].

Seventeen testimonies were selected randomly within a purposive sampling frame, ensuring diversity across key demographic and experiential variables such as period of abuse, age at the time of abuse and sex [2.2; Brown et al., 2020]. This ensured the qualitative analysis reflected both the thematic complexity and socio-demographic breadth of CSA survivor testimony, supporting cross-case analysis of symbolic, cognitive, and networked disruptions in autobiographical recall [7.1–7.8; 8.2–8.3].

4.3 Epistemological Framework

This study is situated within a critical realist and post-constructivist framework (Archer,

1995; Barad, 2007; Bhaskar, 1975; Guba & Lincoln, 1994) conceptualising trauma testimony as both materially grounded and symbolically mediated [2.3; 3.1]. Testimony is treated as a discursive–symbolic act shaped by relational and affective dimensions [3.3.2–3.4.3; 7.1–7.8].

The analysis engages with critiques of truth commissions (French, 2009; Kashyap, 2009; Lebedeva, 2024; Maisel, 2011) which caution that such mechanisms risk reproducing disempowering institutional dynamics [7.7]. In response, this study adopts qualitative sensitivity and phenomenological approaches that account for the embodied and affective qualities of testimony (Knowles, 2021; Taylor, 2008), aligning with the networked and relational framing outlined in the Literature Review [3.3.1–3.4.1].

The interpretive value of metaphor and omission in trauma recollection (Reavey & Brown, 2009) demonstrates the need for analysis beyond rigid coding frameworks [3.3.3–3.3.4; 7.5]. Disclosure is therefore understood as an iterative and relational process rather than a discrete event (Alaggia et al., 2017; see also 2.2; 7.8). This perspective acknowledges stigma and fear of disbelief as barriers to disclosure (Alaggia et al., 2017; Brattfjell & Flåm, 2019; Hunter, 2011) [8.2]. Survivors may adopt stigma management strategies, including selective or partial disclosure, to navigate potential outcomes (Maiorana et al., 2022), reflecting adaptive agency within structural constraints [7.7; 8.3].

4.4 Ethical Considerations

This study uses anonymised testimony data made publicly available by the Independent Inquiry into Child Sexual Abuse (IICSA) through the Truth Project. These testimonies were collected under the Inquiry's formal ethical protocols, which ensured informed consent, the right to withdraw and the implementation of trauma-informed practice throughout the engagement process. Participation was strictly voluntary and only

individuals who had explicitly opted in for research use of their accounts were included in the dataset.

All participants received clear information, verbally and in written form, about the purpose of the Truth Project and the use of their data for research. Consent procedures were piloted and cognitively tested to ensure comprehension and participants retained the right to withdraw their contribution at any stage before publication. The Inquiry provided pre- and post-session emotional support, trigger-awareness protocols and continuous monitoring of wellbeing during interviews. Staff were trained in safeguarding, trauma-informed listening, avoiding re-traumatisation, minimising leading questions and allowing participant-led pacing of the disclosure process.

Oversight was provided by the Inquiry's Research Ethics Committee, which included external academics, safeguarding staff and a member of the Victims and Survivors Consultative Panel (VSCP). The VSCP ensured that research processes and outputs reflected survivor priorities and preserved agency. All data were anonymised and redacted before release to remove names, dates, institutional identifiers and other potentially identifying information. Minimal editing was carried out solely to protect confidentiality, with language and sequencing preserved to maintain narrative integrity.

Interviews were reviewed, anonymised and approved for public release under the Data Protection Act 2018, relevant safeguarding legislation and statutory disclosure requirements.

Ethical standards for the secondary analysis of sensitive material were followed in line with the University of East London's ethical framework and the British Psychological Society's guidelines on internet-mediated research, ethics and conduct. No direct contact was made with survivors. The research respects copyright ownership by HM Government

and data guardianship by IICSA, with no redistribution of materials beyond the scope of this project. A transparent audit trail of analytic decisions and ethical reflections has been maintained to support accountability, replicability and compliance with survivor-centred ethical practice.

4.5 Participants

This study employs testimonies from the 691 school-related accounts submitted to the Truth Project (IICSA, 2022). From this dataset, seventeen testimonies were selected randomly within a purposive sampling frame, ensuring diversity across key demographic and experiential variables such as period of abuse, age at the time of abuse and sex [2.2; Brown et al., 2020]. This ensured the qualitative analysis reflected both the thematic complexity and socio-demographic breadth of CSA survivor testimony, supporting cross-case analysis of symbolic, cognitive and networked disruptions in autobiographical recall [7.1–7.8; 8.2–8.3].

4.6 Data Collection

Testimonies were accessed through the UK National Archives Discovery Service and derived from private sessions, telephone interviews, or written submissions to the Truth Project, with the format determined by participant preference. All accounts were anonymised and redacted by the Inquiry before release, in line with the Data Protection Act 2018 and safeguarding requirements. Private sessions and telephone interviews were facilitated by trained staff, with safeguarding protocols and emotional support provided before, during, and after participation. Written submissions offered an alternative format for participants who preferred to provide their testimony in writing. This combination of methods ensured that participants could share their experiences in the manner most appropriate to their needs, while maintaining ethical and procedural safeguards.

4.7 Analytic Procedure

Reflexive Thematic Analysis (Braun & Clarke, 2006, 2019) was applied to survivor accounts from the Truth Project Thematic Report: Child sexual abuse in the context of schools (Brown et al., 2020), supplemented by interpretive insights from the IICSA Final Report (Jay et al., 2022), generating thematic codes: narrative disjunction [7.4], metaphorical function and symbolic disruption [7.5], network agency [7.6], quantum inference patterns [7.2], temporal–ontological rupture [7.7], autobiographical reconstruction [7.8] and multiple network disruption [7.1].

The analysis was situated within narrative complexity, informed by trauma theory, linguistic models and symbolic–network frameworks [3.3–3.5; 7.1–7.8]. The analysis prioritised properties including non-linear sequencing, metaphor, omission and narrative disruption.

Thematic analysis developed analytic codes articulating the principal modalities of disruption and reconstruction evident in survivor testimony. Within the domain of narrative disjunction, emergent codes included temporal fragmentation, retrospective reframing, conflicted timelines, persistent recall and trigger-induced temporal collapse. Processes of metaphorical and symbolic mediation were indexed through metaphoric substitution, shadow imagery, sensory–affective displacement and euphemistic obliqueness. Dimensions of ontological breakdown were indexed by emotional contradiction, disidentification and fusion, self-blame, internalised culpability, somatic alienation and psychological collapse. Systemic rupture was indicated in the codes of delegitimised disclosure, symbolic invalidation, institutional mockery and protection of the perpetrator. Epistemic instability was indicated in contradictory belief states, sudden reinterpretation, conditional moral framing and recognition of manipulation. Finally,

mechanisms of autobiographical reconstruction and narrative repair were represented by cognitive reappraisal, linguistic anchoring, life-course counterfactuals and symbolic closure acts. Six thematic domains [5.0] were identified:

1 Narrative Disjunction and Temporal Collapse [5.1; 7.4].

2 Metaphor, Symbolic Mediation and Collapse [5.2; 7.5].

3 Ontological Breakdown and Affective Incoherence [5.3; 7.7].

4 Networked Agency and Systemic Rupture [5.4; 7.6].

5 Predictive–Quantum Inference and Epistemic Instability [5.5; 7.2].

6 Autobiographical Reconstruction and Narrative Repair [5.6; 7.8].

Testimonies were read and re-read to ensure familiarity, with initial codes generated manually from meaningful text segments. Coding proceeded iteratively, guided by evolving analytic questions and reflexive engagement. Codes were grouped into higher-order themes through comparison and refinement. The approach centred researcher subjectivity and reflexivity as integral to meaning-making, consistent with a constructionist–critical realist epistemology [4.3].

Insights from Bayesian–quantum cognitive models [3.5.1; 7.2] conceptualised testimony as a probabilistic, context-sensitive process, shaped by affective states and relational conditions. Analytic rigour was maintained through reflexive triangulation between data, theory and thematic coding; transparency in coding decisions; and adherence to qualitative validity criteria; credibility, dependability, confirmability, and transferability (Lincoln & Guba, 1985; Adom et al., 2016).

4.8 Reflexivity

Situated within the philosophical and theoretical positionality outlined in Section 2.3, reflexivity here denotes a continuous critical examination of how these assumptions informed analytic choices, interpretive authority and the production of meaning. Reflexivity is reflected in consistent and ongoing engagement with the researcher's positionality, interpretive authority and influence on meaning-making (Berger, 2015; Corlett & Mavin, 2017; Finlay, 2002), while analytic interpretation was consistently revisited to avoid researcher bias throughout the research process, in consideration of the fluidity of its positionality (Folkes, 2022). In viewing metaphor, omission, silence and repetition as viable, meaningful data, this analysis aims to reflect and give insight to the complexity of narrative collapse and symbolic reformation. This approach therefore acknowledges that the disorder often apparent in trauma testimony is essential to the viability of the study (Butler, 2005; Caruth, 1996). This extends to collaborative approaches, where researchers and participants co-construct narratives and meanings (McSkimming, 2017).

This study is informed by the view that knowledge is situated, relational and contingent (Finlay, 2002; Haraway, 1988; Stolorow, 2003). Meaning is emergent in dynamic interaction among researcher, testimony and context. Reflexivity was conducted structurally, adopting interpretive tools that resist imposing linear form on non-linear testimony. Subjectivity was seen as co-constitutive to meaning construction (Braun & Clarke, 2019), in line with dialogical and trauma-informed epistemologies (Butler, 2005; Caruth, 1996; McSkimming, 2017).

5.0 Coding Framework

Testimonies from CSA survivors demonstrate processes of symbolic–narrative disruption,

whereby trauma fragments both narrative and affective coherence, overwhelms the symbolic function and destabilises identity formation. The following thematic domains structure this symbolic–narrative disintegration.

5.1 Narrative Disjunction and Temporal Collapse

Disruption in temporal sequencing, memory coherence and autobiographical continuity undermines narrative time, producing fragmented memories, testimonial gaps and disjointed personal histories (Crossley, 2000; Herman, 1992; Stolorow, 2016) [3.3.1]. CSA trauma also collapses temporal distance (Crossley, 2000; Ricoeur, 1984) predictive-processing models interpret this as chronic prediction-error in generative self-models (Friston, 2010), sustaining ongoing ontological destabilisation [3.3.2; 3.5.1].

5.2 Metaphor, Symbolic Mediation, and Collapse

Figurative language, euphemism and oblique expression convey trauma while signalling symbolic strain or breakdown. Here, metaphor functions as a protective mechanism, allowing affective articulation without direct representation (Anker, 2009; Bonomi, 2004; van der Kolk, 2014).

5.3 Ontological Breakdown and Affective Incoherence

Semantic breakdown, silence, and dissolution of the speaking self occur when trauma destabilises both identity and language (Caruth, 1996; Felman & Laub, 1992; Lanius, 2015). Trauma violently reconstitutes the self (Brison, 2002) and produces symbolic and affective collapse.

5.4 Networked Agency and Systemic Rupture

Trauma is distributed across systems, displacing individualised blame or causality. Testimonies show dissociation across symbolic and relational systems (Baytaş & Derin,

2024), appearing as systemic rupture within interconnected neural, affective and socio-cultural fields (Barabási, 2002; Jordan & Mitchell, 2000) [3.4.1].

Symbolic collapse thus occurs across interrelational neural, narrative and socio-cultural networks (Borsboom & Cramer, 2013; Menon, 2011).

5.5 Predictive–Quantum Inference and Epistemic Instability

Coexisting and contradictory belief systems, emotional ambiguity and epistemic instability describe disrupted reasoning and unstable meaning attribution (Busemeyer & Wang, 2015; Janoff-Bulman, 1992). Under predictive–quantum models [3.5.1; 3.4.3.1], trauma generates superposition states that collapse into fragmentary testimonial outputs in response to contextual cues. These collapses can occur in temporal as well as semantic domains, producing sudden reinterpretations of earlier experiences when new developmental or moral vantage points are reached.

5.6 Autobiographical Reconstruction and Narrative Repair

Retrospective reassembly of fragmented experience into narrative form enables survivors to rebuild disrupted memory and identity. Narrative repair aligns with models of memory reconsolidation and meaning making (Felman & Laub, 1992; McAdams, 1993; Peckham, 2023) [3.5]. This process often occurs dialogically, through relational validation and may integrate both recovered and reinterpreted memories into a coherent autobiographical self.

Integrative Note:

This six-theme framework positions trauma testimony as symbolic and probabilistic reconstruction, with narratives emergent from neurologically, symbolically and relationally configured systems. Using linguistic relativism (Pablé, 2020), neurocognitive processing (Athanasopoulos & Casaponsa, 2020) and narrative ontology (Whitehead,

1978; Caruth, 1996), testimonial disfluency is framed as ontological rupture and quantum-symbolic breakdown rather than pathology (Busemeyer & Wang, 2018; Smolin, 2006) [2.2; 7.1–7.8; 8.2–8.3].

6.0 Analysis

6.1 Narrative Disjunction

Narrative disjunction in CSA testimony reflects disrupted temporal sequencing, causal coherence and autobiographical continuity [3.3–3.5; 7.4]. Participants described temporal gaps, blackouts, flashbacks and dislocation from past events, consistent with complex PTSD and Trauma-Related Altered States of Consciousness (TRASC) (Frewen & Lanius, 2015; Nicholson et al., 2017; Schlumpf et al., 2021) [3.4.2; 7.3]. These disruptions often presented as fragmented and shadow memories [Appendix B, 2.1], where survivors reported incomplete or inaccessible recall, knowing “you don't know half of what happened” and living with a sense of fragmented perspective that resists full restoration:

“You know that you don't know half of what happened to you as a child. You have many ‘shadow memories’… Like having a partial view of something just to one side of your vision but mainly out of view. You live your life knowing you will never know/recall what happened to you because it was simply too traumatic.” [P#]

Three participants reported PTSD symptoms or formal CPTSD diagnoses, including one who had “a nervous breakdown every day.” Such accounts support symptom-network findings in CSA, where guilt/detachment act as central nodes affective arousal precipitates wider narrative collapse (McBride et al., 2019; McNally et al., 2017) [7.1; 7.7].

Dissociation was described during abuse and over the life course, often as living ‘out of

body' [Appendix B, 5.2], before reconnecting with emotions in later life. Survivors described losing time "I lose days, months… it just cuts out, like a film reel" and experiencing temporal collapsing through triggers [2.2], such as fruit flies decades later evoking vivid sensory memories. In one account, "I can still see his hands like it was yesterday," reflecting persistent, vivid memory [2.4] where trauma resists normal fading.

Present tense descriptions ("I can see the man. I can see his shape") indicate present tense for past events [3.4], suggesting immediacy and unresolved emotional impact. These shifts align with Self-Memory System and Dual Representation Theory (Brewin et al., 1996; Conway & Pleydell-Pearce, 2000) [3.3.4; 7.4] and with DMN, CEN and SN disruption in temporal binding and top-down control (Lanius et al., 2010; Lebois et al., 2022; Menon, 2011) [3.4.2; 7.3].

Ellipses and pauses [Appendix B, 3.5] marked moments of realisation or emotional strain [7.5], functioning as symbolic work that re-engages autobiographical meaning networks (Citron, 2020; Ricoeur, 2004; Jacobs, 2015; Tay & Neimeyer, 2021) [3.3.3; 7.5–7.6]:

"The, kind of – like I say, the, sort of, crashing realisation that..." [P#]

"That went on for about 15 minutes and at the end of it…" [P#]

These dissociative and fragmented states align with TRASC dimensions of disrupted time, body, emotion, and thought [3.4.2; 7.3], linked to large-scale network disintegration in the DMN, CEN, and SN (Lebois et al., 2020) and neurophysiological collapse of narrative-symbolic coherence (Krohn et al., 2023; Pessoa, 2025) [7.1; 7.4].

Persistent instability was evident: nightmares, depression, flashbacks, emotional suppression, active avoidance, and numbing (e.g., alcohol use). Internalised blame further suppressed disclosure and recovery:

“Maybe I’d brought it on myself. I asked for it. So many things. I just blamed myself continuously.” [P#]

Some participants expressed awareness of “a life that could have been,” signalling a rupture in integrating lived experience with imagined identity [Appendix B, 5.6]. This reflects breakdown in emplotment (Ricoeur, 1984), collapse of autobiographical continuity (Crossley, 2000) and a chronic prediction-error state (Friston, 2010; Wilkinson et al., 2017) [3.5.1; 7.2] where the self-model cannot reconcile prior identity with trauma’s contradictory reality.

6.2 Symbolic Breakdown and Linguistic Relativism

Survivor testimony frequently replaces direct description with *metaphorical and indirect language* [Appendix B, 1.1], *non-specific references* [1.2], or *euphemistic terminology* [1.3] to describe abuse [3.3.3; 7.5]. Phrases such as “sex slave” or “teacher’s pet” convey abusive dynamics without direct naming, while perpetrators and institutions used terms like “relationship” or “affair” to obscure coercion. Survivors also employed *impact-focused descriptions* [1.4] (“the pain of what had happened,” “obliterating the pain” with alcohol) as an alternative to narrating events, allowing emotional disclosure through aftermath rather than content.

“I feel, I do now believe that I was his slave. I feel like I became a slave to him for sex. I was his sex slave. And that’s the only way that I can put it.” [P#]
“...you try and protect the school and they try and protect everyone in it.” [P#]

One participant recalled a perceived sense of control, later reframed as grooming, describing *retrospective temporal reappraisal* [Appendix B, 2.3]:

“...for a lot of years, I’d thought, well, you know, I’d assimilated this experience and I

was in control, but then you realise, when you are [the same age as perpetrator], that 15's – they're children." [P#]

Euphemistic reframing by perpetrators and institutions functioned as discursive power (Fairclough, 1995; Foucault, 1972) [3.4.4], recoding coercion into socially acceptable narratives:

"Several of the staff at boarding school knew about this 'relationship' and would joke about it asking me, laughing, 'Where is your new boyfriend now?' I only learned this year that he had told them that I wanted this relationship and that I had initiated it. I guess they believed him. Nobody ever asked me if this was true." [P#]

Indeterminate terms [Appendix B, 1.2] such as "it" or "this" often appeared in testimony, functioning as linguistic placeholders where direct symbolisation was absent [7.5]. The fruit fly example "40 years later [they] are a trigger point still" illustrates *temporal collapsing through triggers* [2.2], where mundane sensory cues elicit abuse memories decades later.

Tense shifts [Appendix B, 3.1] describe re-evaluation:

"…kidding myself that he 'loved me'… I do now believe…" [P#]

This is consistent with the Self-Memory System, where event-specific knowledge is repeatedly re-integrated into autobiographical memory (Bruner, 1990; Conway & Pleydell-Pearce, 2000) [3.3.4; 7.4]. *Circularity and repetition* [3.2] ("terrible price… terrible price," "evil, evil, evil") suggest unresolved affect and ongoing symbolic work [7.5; 7.6]:

"He's [perpetrator] such an evil, evil, evil man. He's evil, he did to me. So evil … He

knew what he was doing to me. … I completely lost myself." [P#]

In linguistic relativity (Whorf, 1956), these patterns show that trauma alters symbolic capacity; limiting direct representation and enabling alternative expressive forms. Where metaphor and euphemism were internally generated, they functioned as strategies in sustaining agency (Radstone, 2007), but when externally imposed, they served to silence or minimise.

6.3 Quantum Collapse and Dissociation

Inquiry testimony shows oscillation between *minimisation vs recognition* [Appendix B, 4.1], *numbness vs intensity* [4.5] and conflicting interpretations of abuse impact, including on sexuality and intimacy [7.2; 7.4]. These contradictions also describe *detachment vs persistent memory* [4.4] and reframing from *"relationship" vs grooming awareness* [4.3]. Explicit affectionate attachment to perpetrators is absent; references such as "teacher's pet" are understood as role-based grooming rather than genuine affection [1.5].

Dissociative detachment (*dissociation and disembodiment* [5.2]) — "living 'out of body'" coexists with *persistent, vivid memory* [2.4], acute distress and anger, suggesting unstable affect typical of complex trauma and CPTSD (Frewen & Lanius, 2015; van der Kolk, 2014) [6.1; 7.2]. Avoidance and suppression (e.g., alcohol use) alternate with *triggered affect responses* [5.4] when events are recalled.

This suggests the coexistence of *fragmented and shadow memories* [2.1] with certainty about the fact of abuse but uncertainty about details; most explicit in:

"You know that you don't know half of what happened to you as a child. You have many 'shadow memories'... Like having a partial view of something just to one side of your vision but mainly out of view. You live your life knowing you will never know/recall

what happened to you because it was simply too traumatic." [P#]

These *memory gaps and shadow knowledge* [5.3] demonstrate epistemic instability in trauma recall, describing a superposition of knowing/not knowing, consistent with predictive–quantum inference models [7.2]. Temporal and semantic instability also emerge in *retrospective temporal reframing* [2.3], where reaching the perpetrator's age or other developmental milestones precipitates sudden reinterpretation:

"…kidding myself that he 'loved me'… I do now believe…" [P#]

Institutional minimisation [6.2; 7.6] supported silencing and identity conflict (*self-blame and identity conflict* [5.5]), reconceptualising abuse as "relationships":

"Several of the staff… knew about this 'relationship'… Nobody ever asked me if this was true." [P#]

While no evidence appears of victim/perpetrator identity convergence, contradictory self-states (*numbness vs intensity* [4.5], *attachment vs horror* [4.2]) are strongly represented. These patterns of sudden affective shifts, reappraisals precipitated by contextual change, and unresolved semantic contradictions partially support the view of trauma recall as a superposition state, collapsing into reinterpretation when initiated by new contexts [7.4; 7.8].

6.4 Ontological and Temporal Disruption

Participant accounts reveal a destabilisation of ontological and symbolic continuity, undermining coherent identity [7.4; 7.5]. Reflections on *lost self-narratives* [5.6] often appear in counterfactual form, imagining *"a life that could have been"*:

"...having reached the age I am, I'm thinking, well, could my life – I mean, I know it's

abstract, but if it hadn't have happened, my life may have been different, you know? But we can never say that, can we?" [P#]

Dissociation and disembodiment [5.2] compound this rupture, with survivors describing decades of detachment:

"Living 'out of body' most of your life. It is only in the last two years that I have learned how to come back into my body where I can now feel my emotions." [P#]

Fragmented and shadow memories [2.1] frequently impede narrative continuity, consistent with breakdowns in *emplotment* (Ricoeur, 1984) and deferred understanding (Caruth, 1996; Felman & Laub, 1992). Predictive-processing models interpret these as chronic prediction-error states in *temporal collapsing through triggers* [2.2], where salient cues override chronological integration (Friston, 2010; Wilkinson et al., 2017) [7.2; 7.8].

A key example is the *fruit fly trigger* [2.2]:

"…we've had this very hot summer last year… plagued by fruit flies… things like that… 40 years later are a trigger point still." [P#]

Similarly, *retrospective temporal reframing* [2.3] occurs when developmental milestones collapse temporal distance, as in the *crashing realisation* [3.5] that a perceived "relationship" was grooming:

"...the, kind of – like I say, the, sort of, crashing realisation that… no, it wasn't a relationship; I was groomed…" [P#]

These events sustain *cyclical temporal intrusions* [2.5], where the past repeatedly intrudes ("a week never goes by") and *persistent, vivid memory* [2.4] resists fading:

“I can still see his hands like it was yesterday.” [P#]

One participant described the perpetrator as “almost like God” [4.2], likely a role-based manipulation rather than affectionate attachment [1.5]. Across testimonies, the interplay of *minimisation vs recognition* [4.1], *numbness vs intensity*[4.5] and embodied detachment underscores how CSA collapses temporal and symbolic distance, leaving survivors inhabiting incompatible temporal–semantic frames [7.2; 7.4].

While neuroscientific or quantum-relational mechanisms remain theoretical superpositions, Inquiry accounts provide phenomenological evidence for ontological rupture, temporal collapse and counterfactual life narratives, all of which align closely with the coding domains.

6.5 Relational Networks and Distributed Agency

Inquiry testimonies situate abuse within broader relational and institutional systems in opposition to a view of isolated interpersonal events. Multiple accounts demonstrate *role-based and action references* [1.5] such as “teacher’s pet,” and institutional complicity where staff ignored, normalised, or failed to intervene [7.7; 7.8]:

“Several of the staff at boarding school knew about this ‘relationship’ and would joke about it asking me, laughing, ‘Where is your new boyfriend now?’” [P#]

This form of *euphemistic terminology* [1.3] recodes coercion into socially acceptable terms, aligning with institutional minimisation [6.2; 6.3]. One participant described discovering that the perpetrator had framed her as an instigator:

“I only learned this year that he had told them that I wanted this relationship and that I had initiated it. I guess they believed him. Nobody ever asked me if this was true.” [P#]

Triggers embedded in the material environment (*temporal collapsing through triggers* [2.2]) highlight how affect and memory are distributed across relational–material networks (Barad, 2007) [7.6; 7.7]:

"…we've had this very hot summer last year. In our house it were plagued by fruit flies… things like that… 40 years later are a trigger point still." [P#]

Participants often shifted from *minimisation vs recognition* [4.1] ("kidding myself he loved me") to conviction ("I do now believe…") and moved between past and present tense (*tense shifts* [3.1]) when recounting abuse. Circularity and repetition [3.2] ("terrible price… terrible price") marked unresolved processing and symbolic interpretation [7.5]:

"He's such an evil, evil, evil man. He's evil, he did to me. So evil… I completely lost myself." [P#]

These patterns support a view of *probabilistic narrative reconstruction*, where meaning emerges through ongoing *explicit re-evaluation markers* [3.3] ("but then you realise…") rather than fixed, linear recall [7.2; 7.6; 7.7]. Survivor anger was frequently directed not only at perpetrators but also at *distributed agency* within institutional networks; staff who enabled, ignored, or legitimised abuse narratives [7.8].

This aligns with socio-ecological and network models of CSA (Bronfenbrenner, 1979), and with narrative identity frameworks in which coherence emerges dialogically through *relational epistemology* [7.7; 7.8]. Within this framing, fragmentation is not a deficit but a situated process of meaning-making (Crossley, 2000; Tasker, 2003), in which linguistic markers of euphemism, repetition, temporal collapse, describe the persistence of trauma and the survivor's active renegotiation of narrative identity over time.

6.6 Dimensional Reconstruction and Autobiographical Integration

Survivors of CSA engage in ongoing narrative reconstruction to re-establish identity, often reinterpreting earlier experiences in response to new developmental, relational, or moral perspectives [7.8]. Inquiry accounts show retrospective reframing from perceived control or mutuality to recognising victimisation; examples of retrospective temporal reframing [2.3] and explicit markers of re-evaluation [3.3].

Survivors may have believed they had agency, understanding, or acceptance of the abuse at the time. Later reflection, supported by the Inquiry evidence, shows that this perceived agency may have been manufactured by the abuser through manipulation. This interpretation reframes earlier feelings of "coping" or "managing" the abuse as integral to the abuse itself, rather than as indicators of adaptation. [6.2; 6.5]:

"…the, kind of – like I say, the, sort of, crashing realisation that… no, it wasn't a relationship; I was groomed as a child and groomed into thinking that it was fun and secretive and that it was completely okay." [P#]

These instances show present tense for past events [3.4], sustaining immediacy and indicating incomplete temporal integration. Survivors also describe the ontological impact of abuse in counterfactual form (lost self-narratives [5.6]):

"...having reached the age I am, I'm thinking, well, could my life – I mean, I know it's abstract, but if it hadn't have happened, my life may have been different, you know? But we can never say that, can we?" [P#]

Such reflections combine minimisation vs recognition [4.1] with attachment vs horror [4.2], marking ongoing identity negotiation. While some survivors integrate partial memories and meanings, many accounts retain fragmented and shadow memories [2.1] often acknowledged as unrecoverable:

“You know that you don't know half of what happened to you as a child. You have many ‘shadow memories’… Like having a partial view of something just to one side of your vision but mainly out of view.” [P#]

Autobiographical reconstruction frequently involves relational triggers and temporal collapsing through triggers [2.2]) that prompt sudden reinterpretation; for example, reaching the perpetrator’s age or becoming a parent to a child of the same age at time of abuse. These events collapse into the present, initiating reappraisal and integration attempts.

Even where survivors achieve greater narrative coherence, linguistic features such as circularity and repetition [3.2] (“terrible price… terrible price”) and ellipsis and pauses [3.5] (“…crashing realisation that…”) indicate ongoing symbolic interpretation. These are consistent with predictive processing accounts [7.2; 7.6], where identity reappraisal is cyclical, initiating under specific contextual or affective conditions.

The Inquiry evidence supports a model of dynamic, non-linear meaning-making, in which identity renegotiation is recurrent, emergent from distributed neural, narrative and relational systems. Here, markers of tense shifts, metaphorical substitution, euphemism, temporal collapse, are not seen as signs of disruption but active processes in survivor-led reconstruction, mediating between lived experience, memory and evolving self-concept over time.

7.0 Discussion

The study provides support for the central hypothesis that childhood sexual abuse precipitates symbolic collapse, characterised by disruptions in autobiographical coherence and that recovery is advanced through distributed, networked processes of re-

symbolisation [2.2; 3.1; 3.3.4; 3.4.3; 5.0]. Testimonial disfluencies demonstrated in disrupted temporality, narrative omissions, metaphorical substitutions and affective distortions, were consistently identified in the data and correspond with hypothesised outcomes derived from predictive-processing, network-theoretical and quantum-cognitive models [5.1; 5.2; 5.3; 3.2.1; 3.5.1; 3.4.1–3.4.3; 3.5.2; 7.2]. These findings corroborate the study's hypothesis that CSA-related trauma is not accurately conceptualised as a discrete pathology, instead as a systemic disruption embedded across neural, linguistic and socio-symbolic networks [3.2; 3.4; 3.5; 5.0; 7.1].

The analysis also indicates that support for the supplementary hypotheses was heterogeneous [2.2]. While testimonial incoherence and affective fragmentation were strongly evidenced [5.1; 5.2; 5.3; 7.3], the hypothesis of systemic metaphorical collapse received partial support, with several testimonies demonstrating adaptive metaphor use rather than its absence [3.3.3; 5.2; 7.5]. Similarly, dissociation was variably represented as both a maladaptive disruption and, in certain contexts, a protective or strategic adaptation [3.2.2; 7.4]. This heterogeneity demonstrates the necessity of viewing CSA trauma as a plural and context-dependent phenomenon, rather than as a unitary process [3.1; 8.2; 8.3].

The following sections (7.1–7.6) elaborate these findings in multiple theoretical frameworks, the degree to which each model is supported, partially supported, or not supported by the Inquiry testimonies [7.1–7.6]. The findings integrate neurobiological, cognitive, linguistic and socio-ecological perspectives to situate symbolic collapse and recovery as emergent processes within distributed and relational systems [3.2–3.5; 5.0; 7.0].

7.1 Multiple Network Models of Symbolic Collapse and Recovery

The findings support the hypothesis that CSA trauma precipitates symbolic collapse

through systemic network disruption, with recovery emerging via distributed re-symbolisation across affective, cognitive, neural and narrative domains [2.3; 3.3.1; 3.4; 5.5]. Symbolic collapse is conceptualised here as a networked breakdown of meaning-making, with recovery emerging through re-symbolisation across affective, cognitive, neural and narrative domains [2.3; 3.3.1; 3.4; 5.5]. CSA-related trauma is associated with altered functional connectivity in the amygdala's basolateral and centromedial nuclei, impairing salience detection and emotional regulation (Haris et al., 2023) [3.4.1; 8.3], alongside disruptions in the hippocampus, medial prefrontal cortex and default mode network (Patel et al., 2012) [3.4.1; 8.3]. Connectome-based modelling predicts PTSD symptom severity via altered resting-state connectivity in visual, limbic, subcortical–cerebellar and motor circuits (Suo et al., 2020) [3.4.1; 8.3].

These findings align with Parallel Distributed Processing (PDP) models (Abbott et al., 2013; McClelland, 1988; Rogers & McClelland, 2014; Taylor et al., 2011) [3.4.1; 7.1; 7.5–7.6], where degraded activation patterns create representational gaps in autobiographical recall, consistent with narrative absences identified here [6.1; 6.4; 8.2; 7.4].

Small-world network theory (Barabási, 2003; Watts & Strogatz, 1998) indicates that trauma disrupts the balance between local clustering and long-range integration in neural and socio-discursive systems [3.4.1; 5.5; 8.3]. Survivor testimony can therefore be seen as disrupted individual agents (memories, affects, images) that follow local interaction rules but fail to achieve emergent coherence due to connectivity loss and external deviations. Recovery, in this model, is emergent through distributed, localised adjustments (Bouffanais, 2016) and reflects behaviour within dynamic fields in which collective systems self-organise or fragment depending on connectivity and feedback dynamics

(Köhler, 1947).

In complex PTSD, triphasic (Janet, 1925) phase-oriented treatment models, as recommended in the ISSTD Guidelines for Treating Dissociative Identity Disorder in Adults (ISSTD, 2011), can restore DMN and prefrontal connectivity in theta/alpha bands, improving regulation and reducing dissociation (Lanius et al., 2010; Schlumpf et al., 2021) [7.6; 8.2]. These staged interventions integrate safety, stabilisation, trauma processing and integration phases, providing a neurobiological and clinical rationale for sequencing therapeutic goals in survivors of CSA and complex dissociation.

Phase-based therapeutic frameworks (ISSTD, 2011) and narrative approaches informed by narrative therapy models (Epston, 2008; Ferenczi, 1933/1988; Harris, 2009; White & Epston, 1990; White, 2007) are supported by neurobiological evidence for decentralised, staged reconstruction across fragmented narrative systems [2.3; 8.2–8.3].

This model also aligns explicitly with Field Theory (Lewin, 1936, 1943), in which behaviour emerges from dynamic interactions between the individual and their environment (B = f(P, E)). In CSA contexts, the "life space" of the survivor comprises interdependent neural, relational and symbolic fields that are distorted by trauma. Simultaneous tendencies towards disclosure and avoidance can be read as unresolved tension systems within this space, sustained by institutional silences and coercive power relations (Bourdieu, 1977; Latour, 2005) [3.4; 7.7]. In this framing, network disruption is both neurobiological and socio-symbolic, and recovery requires field reorganisation across multiple domains of the survivor's environment, enabling a re-stabilisation of narrative coherence and agency [7.4; 7.6; 7.8–7.9].

7.2 Quantum–Bayesian and Network Models of Trauma Cognition

Overall, the results support the hypothesis that testimonial incoherence demonstrate probabilistic and quantum-like processes of meaning collapse and reconfiguration. However, evidence for contextual inference and Bayesian updating remains theoretical in this dataset and requires further empirical validation. Orchestrated Objective Reduction (Orch-OR) and cognitive superposition models (Penrose & Hameroff, 1996; Pothos & Busemeyer, 2021) conceptualise trauma as a probabilistic system where dissociative states coexist until retrospectively resolved [5.5; 6.3; 3.4.3]. Testimonial incoherence arises because autobiographical meaning remains indeterminate, collapsing only when survivors commit to a narrative [6.1; 3.2.1]. These collapses occur in semantic and temporal domains, producing abrupt reinterpretations from new developmental or moral vantage points [6.4; 7.4].

Symbolic entropy and narrative resolution (Aerts & Beltran, 2021; Daviddi et al., 2024) describe how trauma increases informational disorder, requiring reconfiguration for coherence. Quantum-like processes of superposition and contextual inference model testimonial fragmentation as probabilistic state transitions mediated by context (Bruza & Busemeyer, 2012, 2024) [5.5; 6.3; 3.4.3]. The Global Neuronal Workspace (GNW) and symbolic architectures (Dehaene & Changeux, 2011; Germann, 2019) explain how coherent narrative awareness can re-emerge following symbolic collapse [3.4.1; 7.5; 8.2].

Quantum probability theory accounts for order effects, contradiction tolerance and non-classical reasoning in trauma narratives (Pothos & Busemeyer, 2013, 2021; White et al., 2013) [5.5; 6.3; 3.4.3]. Bayesian inference [3.2.1] supports this by modelling the brain's updating to minimise prediction error (Friston, 2010, 2012; Knill & Pouget, 2004; Rao & Ballard, 1999). In trauma, updating destabilises, producing overweighted threat priors (Held et al., 2023; Reis et al., 2023) and mismatches between expectation and sensory–affective input [6.1; 7.4]. Predictive processing models (Kube et al., 2020; Wilkinson et

al., 2017) link re-experiencing to persistent high-precision threat priors overriding contradictory evidence [6.3; 3.2.1].

Bayesian learning's integration of new evidence is essential for recovery (O'Reilly et al., 2012). Combined with quantum cognition, failed updating produces contextual collapses (Aerts, 2008; Pothos & Busemeyer, 2021), where meaning remains indeterminate until therapeutic or narrative reframing [6.4; 3.4.3; 7.6]. This belief-revision process corresponds with memory reconsolidation (Etz & Vandekerckhove, 2018; Kruschke, 2015; Stappenbeck et al., 2023; van de Schoot et al., 2017) where symbolic integration reduces uncertainty and restores coherence [7.8; 8.2].

Parallel Distributed Processing (PDP) models (McClelland, 1988; Rogers & McClelland, 2014) describe cognition as emergent from activation patterns across interconnected units [5.5; 7.1; 3.4.1]. Trauma disrupts these distributed representations, weakening connections and creating omissions in autobiographical memory (Abbott et al., 2013; Taylor et al., 2011). Recovery functions as retraining epochs, re-establishing associative links for symbolic and semantic coherence [6.4; 7.5; 7.6].

7.3 Network and System Theories

The Inquiry material supports the hypothesis that trauma is distributed across relational and socio-material networks, with institutional complicity and non-linear narrative structures evident. Evidence for rhizomatic recovery processes was partial, indicating that some elements of the systemic model remain conceptual and not fully evidenced. Systems theory views the mind, body and environment as interconnected, dynamic systems in which subsystems interact to produce emergent outcomes (von Bertalanffy, 1968). It emphasises feedback loops, non-linearity and holism, suggesting that individual experiences cannot be understood in isolation but must be situated within broader

relational, neural and symbolic contexts (Capra & Luisi, 2014).

Probabilistic and distributed principles also apply to socio-material networks shaping trauma and testimony [2.3; 3.4; 5.5; 5.7]. Actor–Network Theory (ANT) frames CSA trauma as distributed across assemblages of human and non-human actors of abusers, institutions, discourse, and silence (Ingold, 2011; Latour, 2005) [3.4; 8.3]. Survivor narratives often take rhizomatic form (Deleuze & Guattari, 1987), with harm and identity emerging non-linearly across related networks [3.4; 6.5]. This distributed agency challenges linear recovery models (Lopez, 2020) and views recovery as a dimensional process (Moulard-Leonard, 2012) informed by poststructural nodes of stasis and change (Johansson & Holmes, 2023) [7.8; 8.3]. Deconstructing the individual–collective trauma binary (Rajiva & Takševa, 2020) can describe the interdependence of personal and sociopolitical harm, with recovery beginning in survivors' reinterpretation of actor-networks into new affective and symbolic assemblages [6.5; 7.8].

ANT overlaps with assemblage theory (Müller & Schurr, 2016), emphasising emergent agency in human–non-human associations forming precarious wholes (Müller, 2014) [3.4; 8.3]. In trauma processing, ANT informs integrative psychotherapy models (Garnier & Courtial, 2015; Jensen, 2019) and aligns with small-world network theory in neuroscience (Bassett & Bullmore, 2006; Bouffanais, 2016) [3.4; 3.4.1]. Healthy small-world architectures optimise local clustering and long-range integration (Watts & Strogatz, 1998), whereas trauma degrades these structures, fragmenting communication between nodes [3.4.1; 7.1].

Recovery involves remapping disrupted actor-networks into adaptive affective assemblages and symbolic constellations, integrating rhizomatic and non-hierarchical structures (Jensen, 2019) to restore connectivity across neural, social, and narrative

systems [7.1; 7.2; 7.6; 7.8; 8.3].

7.4 Narrative Disjunction and Identity

The findings support the hypothesis that CSA trauma disrupts autobiographical continuity and narrative identity, as evidenced in fragmented temporal sequencing, shadow memories and disrupted affective cohesion. Nonetheless, the degree to which these disruptions represent generalisable features of CSA testimony is only partially evidenced.

Fragmented self-narratives in trauma testimony often indicate ontological rupture as disruption in the continuity of self and world (Herman, 1992; Stolorow, 2003) [2.3; 3.1; 5.5; 5.8] and in the collapse of the specious present [3.1]; the temporal contraction in which consciousness synthesises past and future into the lived present (Husserl, 1991; James, 1890/1950). Under trauma, intrusive “nowness” displaces this synthesis, fragmenting autobiographical coherence and compelling survivors into a perpetual present of reliving (Herman, 1992; Stolorow, 2016). Recent neurophenomenological accounts naturalise this phenomenon, linking temporal synthesis with large-scale neural assemblies, showing that the “felt now” emerges from dynamic neural coordination (Varela, 1999). Within the self-memory system, traumatic memories are poorly integrated (Conway & Pleydell-Pearce, 2000), while dual representation theory distinguishes verbally accessible (VAM) from situationally accessible memories (SAM), with SAM often dominating trauma recall (Brewin et al., 1996) [3.2.1]. This impairs temporal sequencing, memory coherence and autobiographical continuity (Crossley, 2000; Stolorow, 2016), producing fragmented memories, testimonial gaps and disjointed narratives [6.1; 7.1].

This integrative framework situates testimonial temporal collapse at the interface of

phenomenology and systems neuroscience. Phenomenologically, trauma suspends emplotment of events into a coherent life story (Frank, 2013; Meretoja, 2018; Ricoeur, 1984) [3.1; 5.5]. Disjunction reflects both symbolic collapse and affective overload [3.4.3; 5.3]. Temporal superposition (Caruth, 1997; Gurevich et al., 2010) can occur, where contradictory temporalities coexist [6.4; 7.2]. Flashbacks and dissociative sequences frequently override linear narrative, sustaining testimonial collapse [6.1; 6.3; 8.2]. Testimony may enable reconstruction through metaphor and social dialogue (De Muijnck, 2022; Jirek, 2016; Leeming, 2013) [3.4.3; 5.2; 5.6] and support post-traumatic growth (Brison, 2002; Saha et al., 2011).

The Inquiry evidences “shadow memories” of partial recall where survivors recognise events remain inaccessible due to trauma [6.1]. Tense shifts, ellipses and pauses mark re-evaluation and temporal disruption [6.1; 6.4].

CSA impacts emotional awareness and regulation: survivors show reduced positive emotional activation and fewer negative emotion words (Luterek et al., 2005) [6.2; 5.2]; emotional abuse correlates with alexithymia (Goldsmith & Freyd, 2005). Many do not self-identify as abused (Goldsmith & Freyd, 2005), indicating disruption to affective processing and self-concept [3.1; 5.3].

Recovery, viewed as a complex adaptive system, therefore involves reconstructing narrative identity through self-acceptance and openness (Chouliara et al., 2014; Kerr et al., 2013) [3.4; 8.3]. Network analysis finds guilt and self-blame central in symptom networks, with arousal less prominent (McBride et al., 2019) [7.1; 5.5]. Psychotherapy supports meaning reconstruction and integration of fragmented memories (Neimeyer et al., 2006; Waller & Scheidt, 2010), corresponding with survivor accounts of restoring temporal and existential continuity [7.3; 7.6; 8.2].

7.5 Linguistic Relativism, Metaphorical Function, and Symbolic Disruption

Trauma survivors often show linguistic incoherence, avoidance of explicit naming, repetition and affective loops (Amir, 2018; Eekhoff, 2021) [3.3.3; 5.2; 5.3; 7.4], reflecting metaphorical foreclosure (Gildea, 2018) and impaired capacity for symbol formation (Amir, 2016; Haen, 2020; Winnicott, 1971) [6.2; 7.4]. Early linguistic markers in trauma narratives can predict PTSD dynamics, with greater use of first-person singular pronouns and emotional terms associated with heightened long-term symptom severity (Kleim, Ehlers, & Glucksman, 2007). Trauma fragments the affect-to-symbol process (Bonomi, 2004), prompting reliance on symbolic substitutions (Busch & McNamara, 2020; Durham, 2020) and challenging universal assumptions about fragmentation (Hall & Powell, 2000) [5.6].

Metaphorical function (Modell, 1993, 2003, 2009) locates this disruption in neurocognitive mechanisms transforming affect into meaning [3.4.4; 5.3]. Loss of this capacity leaves experience unformulated (Herman, 1992; van der Kolk, 2014), evidenced in “out of body” reports, oscillations between numbness and distress and externally reinforced minimisation [6.1; 6.2]. Recovery involves reactivating neuro-symbolic systems to restore affect-to-language transformation, particularly when silencing from institutional betrayal constrains agency (Alaggia et al., 2017; Jirek, 2016) [8.4].

Cube models and narrative cartography (Fraas, 2015; Leeming, 2013; Yates, 1966) map affect, temporality and semantics into reconstructive symbolic grammars [5.6; 8.4]. Mindfulness interventions enhance network connectivity (Creswell et al., 2016) and neuroplasticity (Pascual-Leone et al., 2005; Pessoa, 2025) [3.4.1; 5.8], supporting repatterning in complex adaptive systems; neural, narrative, cultural (Bansal et al., 2019; Overton, 2013) [7.1; 8.4]. Healing is non-linear and often aesthetic (Bachelard, 2014;

Simic, 2015) [8.4; 8.5].

Metaphor may reflect cultural discourse rather than pathology (Hollway & Jefferson, 2000) and trauma theory's focus on metaphor loss risks overstating dysfunction (Radstone, 2007) [3.3.3]. Thus, linguistic substitution may be an adaptive strategy [6.2; 8.4]. Symbolic collapse, conceptualised as systemic breakdown of meaning-making [2.3; 3.1; 5.3; 5.8], manifests through incoherence, avoidance, dissociation and repetition (Amir, 2018; Eekhoff, 2021; Gildea, 2018; Winnicott, 1971) [6.2; 7.4]. Testimony therefore functions as a semiotic system in which meaning is displaced, deferred, or coded through substitution and metaphor (Barthes, 1977). Survivors often employ reiterative loops ("terrible price… terrible price to pay"; "evil, evil, evil man… so evil") [6.2], producing unstable symbolic chronologies (Frewen & Lanius, 2015) [3.2.1; 5.5; 5.7]. Testimonies in this study oscillate between minimisation and recognition, attachment and horror, numbness and affect [6.3]. While attachment–horror contradictions are well-documented, they are only partially explicit in Inquiry data. One account describes dissociative detachment punctuated by grief or rage [3.1; 5.7], compounded by external invalidation [6.1; 8.4].

Trauma also disrupts embodiment (Crossley, 2000; Ogden et al., 2006), producing integration failure (Culbertson, 1995; Janet, 1919) [3.1]. Cognitive–behavioural models frame dissociation as conditioned threat response (Cao et al., 2025; Ehlers & Clark, 2000) [3.2.1]. Narrative psychology recognises all autobiographical memory as reconstructive (Bruner, 1990) and dissociation as potentially adaptive (LaCapra, 2001; Ulman, 1988) [3.2.1; 8.5].

Symbolically, trauma disrupts syntax and metaphor, producing non-linear grammar (Bachelard, 2014; Barthes, 1977; Johnson, 1985) [3.3.3]. Restoring metaphor is central to

narrative repair [3.3.3; 8.4]. Yet unsupported are claims of universal metaphor loss or survivor accounts directly linking metaphor disruption to recovery. Instead, cultural and discursive contexts suggest metaphor disruption, repetition and silence can be adaptive strategies negotiated within social and symbolic constraints [7.3; 8.4].

7.6 Relational, Dimensional Networks and Distributed Agency

A connectionist view of CSA trauma shows disruptions across cognitive and affective systems, where self-blame, guilt and intrusive thoughts act as associative hubs (O'Brien et al., 2019) [3.4.1; 5.8; 6.5]. Inquiry data partly supports this: self-blame and guilt are present, while intrusive thoughts are described but not evidenced as hubs. Multirepresentational cognitive theories (Dalgleish, 2004) and PDP models (Smolensky, 1988) [7.2] frame cognition as interacting associative networks producing emergent behaviour. This remains theoretical in the Inquiry data. TF-CBT addresses such disruptions through narrative and family-based interventions (Foster, 2014) [8.5], though this is not evidenced in Inquiry accounts.

Actor–Network Theory (Deleuze & Guattari, 1987; Latour, 2005) views testimony as shaped by human and non-human actors; institutions, objects, memories, audiences [3.3.1; 5.4; 6.5; 7.3]. Supported in the Inquiry are institutional complicity, role-based grooming and systemic neglect. Survivor agency is partially distributed across these systems; fragmentation is present, but ontological salience remains interpretive (Chakraborty & Mitra, 2004; Leeming, 2013). Non-linear rhizomatic structures (Törrönen, 2022; Deleuze & Guattari, 1987) are also only partly evidenced.

Testimony functions simultaneously as personal account and relational negotiation (Tummons, 2020) [2.3; 3.1; 5.8]. Fragmentation may represent symbolic becoming rather

than narrative failure (Crossley, 2000; Tasker, 2003) [6.5; 8.4], though this remains interpretive. Neurobiological models link trauma-related dissociation to disintegration of large-scale networks (Bansal et al., 2019; Lebois et al., 2020) [3.4.1; 5.8], but this is not evidenced in Inquiry material. Relational ontology (Barad, 2007; Rovelli, 2019; Whitehead, 2010) frames identity reconstruction as co-constituted through ongoing relations [2.3; 3.3.1], again theoretical here.

Narrative reconstruction occurs within cultural and social constraints (Gergen, 1994; Schank & Abelson, 1995) [3.3.1; 8.4]. Inquiry data shows institutional silencing and cultural norms shaping disclosure. Fragmentation may thus be strategic (Hollway & Jefferson, 2000; Radstone, 2007). Survivors reinterpret abuse through adulthood or parenting experience (Andrews et al., 1999; Gergen, 1994) [3.1; 3.3.1]. Institutional discourse influence is evidenced; underplaying of agency remains interpretive (Crossley, 2000) [2.3; 5.8]. Despite fragmentation, narrative repair emerges through testimony (Felman & Laub, 1992; McAdams, 1993), restoring epistemic and symbolic coherence (Brison, 2002; Peckham, 2023) [3.2.1; 7.8].

Bayesian predictive frameworks (Friston, 2010; Wilkinson et al., 2017) conceptualise reconstruction as iterative hypothesis testing [5.7; 7.2], though this remains theoretical in this dataset. Temporal disjunction [7.4] disrupts sequencing, producing gaps and non-linear narratives (Crossley, 2000; Herman, 1992; Stolorow, 2016) [5.1; 6.4].

Research on traumatic memory accuracy (Brewin, 2007; Geraerts & Jeličić, 2008; Loftus & Palmer, 1974; McNally et al., 2022; Porter & Birt, 2001) [3.5.2] challenges universality of fragmentation; this was not tested in the Inquiry. CSA and emotional abuse affect emotional regulation: reduced positive affect (Luterek et al., 2005) and alexithymia (Goldsmith & Freyd, 2005) [6.3; 8.4] are partly evidenced. Many survivors do not self-

identify as abused [5.5; 5.6].

Survivor accounts often situate CSA in relational and institutional contexts [5.4; 7.3; 7.7], with anger extending to enablers [6.5; 8.3]. Recovery is framed as relational and symbolic reconstruction (Draucker & Martsolf, 2008) [7.8; 8.2; 8.4], partially evidenced in testimonial meaning-making but outside the Inquiry's therapeutic scope.

7.7 Implications

CSA trauma is here conceptualised as a quantum–symbolic disruption of autobiographical coherence, emergent across distributed neural, social and symbolic networks [7.1–7.6; 2.3; 3.1; 5.8]. Survivor narratives are adaptive reconstructions emergent from probabilistic–symbolic processes and relational ontologies (Busemeyer & Wang, 2015; Crossley, 2000; Whitehead, 2010) [3.3.1; 5.5; 5.8], rather than deficits. Integrating quantum cognition, narrative medicine and network theory shows testimonial meaning emerging from disruption, with metaphor serving as an epistemological bridge and reparative mechanism (Neimeyer et al., 2006; Ricoeur, 1991) [7.5–7.6]. This supports survivor-led, polyphonic narratives that integrate diverse symbolic modes, position recovery as iterative and systemic situate agency within relational and cultural contexts [8.4].

7.7.1 Practical Implications

Symbolic collapse in CSA testimony is a systemic, multi-level disruption embedded within neural, narrative and socio-ecological systems [3.3.1; 7.3; 7.6]. Recovery is non-linear, involving reactivation of neuro-symbolic mechanisms, restoration of coherence and reclamation of agency in contexts often characterised by institutional betrayal [6.5; 7.6; 8.3]. Combining network neuroscience, predictive processing and phenomenology [7.2; 7.4] shows that reintegration requires cognitive–affective reconfiguration and

negotiation of culturally mediated narrative frames [3.2.1; 3.4.1].

Testimony becomes a site of epistemic and symbolic repair, reconstructing temporality, identity and meaning, while contesting structural complicity [7.3]. Narrative therapy approaches (White & Epston, 1990; White, 2007) explicitly frame this reconstruction as survivor-led meaning-making, privileging the reclamation of authorship over one's life story within supportive relational contexts. This supports this model's emphasis on distributed agency across neural, discursive and socio-material systems and its systemic perspective informs therapeutic, legal and policy approaches that address trauma's distributed nature with equally distributed repair mechanisms [8.2; 8.3]. In policy contexts, this model supports survivor-informed inquiry design, institutional accountability mechanisms and reforms that embed survivor agency within investigative, judicial and service frameworks, ensuring that structural change reflects the distributed nature of trauma and recovery

7.7.2 Clinical Implications

Clinical responses to CSA-related complex PTSD and dissociative disorders benefit from structured, phased approaches that mirror the sequential reintegration needed in disrupted neural and socio-symbolic networks [3.4; 7.1; 7.3]. Triphasic, phase-oriented treatment models (Janet, 1925; ISSTD, 2011) organise intervention into safety and stabilisation, trauma processing and integration/rehabilitation (Herman, 1992; van der Hart et al., 2006). This model is not only supported by clinical consensus but also parallels network neuroscience evidence that local stability must be restored before long-range neural connectivity can be re-established [3.4; 7.1; 8.2] (Lanius et al., 2010; Schlumpf et al., 2021). In practical terms, this means ensuring survivors have affect-regulation capacities before engaging in memory processing and embedding narrative reconstruction within relationally safe and culturally appropriate contexts [7.4; 8.4]. When combined with

somatic and sensorimotor modalities (Ogden et al., 2006), this phased sequencing allows embodied as well as symbolic reintegration, addressing both the neurobiological and experiential dimensions of trauma recovery [3.3.3; 6.3; 7.5–7.6].

The narrative ecology model therefore conceptualises testimony as symbolic, affective and relational meaning-making rather than pathology [7.3; 7.6; 8.4]. This requires moving beyond categorical DSM diagnoses to an ecological–symbolic approach recognising narrative disjunction, linguistic relativism, metaphor and relational entanglement as central to assessment and intervention [5.1; 5.2; 5.4; 5.5; 7.4–7.6]. Recovery should integrate symbolic modalities for narrative repair (Felman & Laub, 1992; Liebig, 2016) and allow survivor-led, non-linear and mythic forms (Borg, 2018; Capella, 2016) [3.3.3; 8.4].

7.7.3 Theoretical implications

Findings support a distributed theory of self that resists mind/body, self/other and fact/fiction dualisms (Whitehead, 1978; Wildman, 2006), seeing trauma as a networked phenomenon embedded in power structures and ontologies of silence (Draucker & Martsolf, 2008; Foucault, 1972) [2.3; 3.1; 3.3.1; 3.4.1]. This study provides a multi-theoretical integration of quantum cognition, narrative psychology, Actor–Network Theory and poetics [5.4–5.8; 7.1–7.3], emphasising memory and identity as distributed and emergent, informed by process ontology (Whitehead, 2010) and relational entanglement (Wildman, 2010). This model aligns with Field Theory (Lewin, 1936, 1943), which views behaviour as arising from dynamic individual–ecology interactions ($B = f[P, E]$) made up of interdependent neural, relational and symbolic fields distorted by trauma. Simultaneous influence in disclosure and avoidance reflect unresolved systems, sustained by institutional silences and coercive power relations (Bourdieu, 1977; Latour,

2005) [3.4; 7.7]. Network disruption is thus both neurobiological and socio-symbolic, with recovery requiring reconstruction across these domains to restore narrative coherence and agency [7.8–7.9].

7.8 Narrative Models

Narrative psychology emphasises coherence in identity reconstruction (Crossley, 2000); psychoanalytic therapy reframes transference as unresolved prediction errors (Rabeyron, 2022) [7.2]. CSA disclosure is nonlinear and multifactorial, informed by individual and cultural factors (Alaggia, 2010; Alaggia et al., 2017) with shame and stigma often delaying disclosure until adulthood. The ecological model best describes these dynamics, aligning with relational–network approaches [7.3; 7.7] and situating disclosure within systems of power, recognition and symbolic legitimacy.

While links between CSA disclosure and PTSD are insufficiently examined, with research often privileging personal/exposure variables over environmental influences (McTavish et al., 2019); evidence supports multi-level interventions of trauma-informed judicial processes and survivor-led qualitative methodologies that accommodate atypical narrative forms and preserve agency in meaning-making (Alaggia, 2010) [8.2].

7.8.1 Dimensional Modelling of Fragmented Testimony

Cube models (Fraas, 2015; Leeming, 2013) and narrative cartography (Yates, 1966) conceptualise traumatic narratives as multidimensional, with axes such as affective intensity, semantic disjunction and spatial–temporal distortion. These support latent topic modelling and cognitive machine clustering, which group content probabilistically [7.2; 7.5; 7.6]. Applied to CSA testimony, these models show survivors reconstructing meaning through non-linear associations, re-linking fragmented memories in affectively and symbolically significant ways.

Computational models demonstrate how disassembled narrative components are reintegrated [8.4]. Unlike classical recall models, these treat memory reconstruction as emergent, context-sensitive and dynamically updated; especially under the emotionally saturated conditions of CSA testimony (Jirek, 2016; Leeming, 2013). Testimonial pauses, contradictions and loops are therefore seen not as deficits but as evidence of probabilistic and symbolic reorganisation within a disrupted semantic field [7.4; 7.6].

Predictive processing and active inference models extend this, with trauma positioned within a predictive coding framework (Wilkinson et al.,2017), interpreting expectation–perception misalignment [7.2]. which models stress responses as maladaptive active inference, where aberrant priors generate PTSD-like behaviours (Linson et al., 2019)' describing pathways from childhood trauma to maladaptive salience via diminished metacognition and disorganisation of self-state and intersubjectivity (Ozdemir et al., 2023). Severe trauma is then linked to impaired representational capacity (Brown, 2019), enabling the development of concrete cognition (Piaget, 1954) and breakdowns in symbol formation [7.5; 7.6]. These models therefore describe CSA trauma as a disruption of probabilistic inference [7.2; 8.4] and a breakdown of symbolic–intersubjective coherence [7.5–7.7].

7.9 Narrative Medicine

Symbolic–computational models (Germann, 2019; Perlovsky, 2006) frame cognition as reconciling dissonant affective and semantic inputs through recursive updating of symbolic representations. In trauma recovery, this corresponds to narrative re-authoring, in the reconstruction of fragmented accounts via metaphor, affective coherence and symbolic substitution [7.1–7.6]. Testimony here becomes a site of re-symbolisation, where identity, memory and social recognition are iteratively restored within therapeutic

and socio-cultural contexts [7.4; 7.8].

A narrative medicine approach (Charon, 2006; Fraas, 2015) validates fragmented CSA survivor narratives as legitimate meaning-making modalities, privileging affective coherence and relational engagement over clinical completeness or chronological sequencing. Recursive symbolic integration models (Germann, 2019; Perlovsky, 2006)) support this view, describing narrative repair as iterative translation of disfluency into coherence through symbolic expression. Narrative re-authoring, informed by literary and clinical traditions (White & Epston, 1990; White, 2007; Yates, 1966; Fraas, 2015), positions metaphor, temporality and symbolic structures as fundamental processes of reintegration.

This symbolic–cognitive reintegration model [8.4–8.5] positions neuro-symbolic architectures and narrative mapping as tools for analysing CSA survivor testimony, extending both methodological and therapeutic applications. It supports survivor-led meaning-making while maintaining cultural and contextual sensitivity, aligning with the multi-network recovery models outlined in 7.1–7.3.

7.9.1 Key Innovations

7.9.1.2 Quantum Cognition and Narrative Collapse

Quantum cognition models interpret survivor narratives as existing in superposition (Aerts & Beltran, 2021; Busemeyer & Wang, 2015; Hameroff, 2013), disrupting coherent narrative states and generating testimonial ambiguity, temporal superposition and semantic entanglement (Caruth, 1996; Herman, 1992) [7.2]. Recovery becomes iterative narrative stabilisation across affective, cognitive and relational dimensions, consistent with trauma as a probabilistic symbolic disruption within predictive processing and

quantum symbolic systems (Friston, 2010; Pothos & Busemeyer, 2022).

7.9.1.3 Symbolic Collapse and Narrative Medicine

CSA can precipitate symbolic collapse, in which conventional language fails to convey lived experience (Caruth, 1997; Crossley, 2000; Kristeva, 2024). Survivor accounts employ metaphor, poetic compression, silence and somatic expression, consistent with this study's hypothesis of testimony as a relational–symbolic act within networked neural, socio-symbolic and ecological systems [7.1–7.3]. Narrative medicine (Charon, 2006; Fraas, 2015) and narrative therapy traditions (White & Epston, 1990; White, 2007) validate such non-linear, polyphonic forms as legitimate meaning-making. Linguistic substitution is then reframed as adaptive symbolic reorganisation, aligning with the study's systemic framing of trauma rather than isolated cognitive-deficit models [7.5–7.6].

7.9.1.4 Networked Narrative Identity

Post-CSA identity is conceptualised here as distributed across neural, social and symbolic networks (Barabási, 2016; Latour, 2005; Whitehead, 2010) rather than as a fixed, unified self [7.3; 7.6]. From a small-world and scale-free network perspective (Barabási, 2002; Watts & Strogatz, 1998), trauma disrupts hub connectivity and alters the efficiency of narrative integration, fragmenting the pathways linking self-states. Testimony then becomes a process of narrative reassembly, drawing on relational, cultural and ecological resources to bridge these disjointed states and restore coherent meaning-making. This perspective corresponds with narrative therapy approaches (White & Epston, 1990; White, 2007), which conceptualise identity as a dynamic, storied construct, co-authored with others and continually renegotiated in context. It also integrates with the connectionist and Bayesian–quantum models of autobiographical disruption outlined in

earlier sections [7.1–7.2], situating identity reconstruction as a networked, probabilistic process embedded in socio-symbolic fields.

7.9.1.5 Metaphor as Epistemological and Therapeutic Tool

In line with the symbolic–metaphor framework (Ricoeur, 1991) [7.5], metaphor operates as both epistemological bridge and therapeutic mechanism, enabling integration when literal language is inadequate. Survivor testimonies reveal layered metaphors that permit safe engagement with traumatic content while preserving agency (Hyvärinen et al., 2010; Neimeyer et al., 2006). This supports metacognitive and narrative psychological perspectives positioning metaphor as central to reconstructing identity, restoring continuity and enabling symbolic repair within disrupted autobiographical systems [7.4; 7.6].

7.9.1.6 Computational and Reflexive Methods

Computational and narrative mapping is proposed through network visualisation, topic modelling, cube models and semantic cartography (Fraas, 2015; Leeming, 2013; Yates, 1966) to trace testimonial disjunctions and restore fragmented meaning structures [7.9.1.1]. Diffractive epistemology (Barad, 2007) conceptualises testimony not as a direct representation of past events but as an emergent diffraction pattern produced through relational–material entanglement. Within this framework, agential realism views trauma narration as an entangled discursive event in which survivor, narrative and listener are co-constituted, emphasising the relational and co-productive nature of meaning. These symbolic–computational methods demonstrate narrative re-authoring processes that reintegrate fragmented memories into coherent autobiographical networks, while also acknowledging the recursive impact of trauma research on researchers. When combined with narrative mapping, latent topic modelling and semantic cartography, these

approaches safeguard researcher wellbeing and advance survivor-led inquiry, supporting the development of trauma-informed technologies that ensure analytic practices remain both ethically responsible and survivor-centred (Germann, 2019; Perlovsky, 2006) [7.9.1–7.9.2].

8.0 Contributions

Testimonial collapse in CSA survivors demonstrates symbolic and neurocognitive disintegration in fractured temporality, narrative gaps and affective distortion [7.1; 7.4]. Survivor accounts show that disfluency, metaphor and non-linear narratives are adaptive reconstructions arising from altered predictive and symbolic processes [7.2; 7.5], not indicators of unreliability.

This study advances a distributed, non-modular theory of self that resists dualisms of mind/body, self/other and fact/fiction (Whitehead, 1978; Wildman, 2006). Integrating the Global Neuronal Workspace (Dehaene & Changeux, 2011) with symbolic architectures (Germann, 2019) produces a neural–symbolic framework in which narrative coherence emerges through recursive re-symbolisation, extending ecological and relational models of trauma into systemic frameworks of symbolic and affective repair (Lewin, 1936, 1943) [7.7.3].

Quantum cognition models (Aerts & Beltran, 2021; Busemeyer & Wang, 2015) theorise contradictory self-states, superposition, and contextual collapses into coherence, while computational–symbolic modelling (Crossley, 2000; Germann, 2019; Perlovsky, 2006) is identified as a methodological interface between cognitive science and trauma studies, capable of mapping disrupted semantic fields and identifying emergent pathways of re-symbolisation [7.5] demonstrating that fragmented testimony can be mapped across multiple semantic and affective domains, enabling reconstruction of coherence within

disrupted symbolic networks [7.8.1]. Interdisciplinary computational methods inform trauma theory by modelling complex cognition and symbolic disruption (Lewandowsky & Oberauer, 2018) [3.2; 7.1].

Network and systems-based approaches demonstrate that disruptions in the default mode, central executive and salience networks (Chamberlin, 2019; Lebois et al., 2022) correspond to testimonial fragmentation and affective disorganisation. These models reframe testimony as a site of epistemic, affective and symbolic repair embedded in relational ecologies of narrative medicine (Barabási, 2002; Latour, 2005; McTavish et al., 2019). [7.9.1.3].

This study demonstrates that narrative visualisation and symbolic mapping (Beck, 2006; Clandinin & Connelly, 2000; Durham, 2020; Mishler, 2000; Mittenentzwei et al., 2022; Simic, 2015) integrate physical, emotional and narrative multiples of experience, supporting survivor-led reappraisal of trauma and the creation of future-oriented narratives (Park & Ai, 2006; van der Westhuizen et al., 2022). Cognitive and narrative network approaches, using schema theory and network mapping (Norambuena et al., 2021; Yates, 1966), offer methodological models that combine qualitative testimony analysis with computational and visual tools, enabling mapping of fragmented narratives into coherent structures [7.8; 7.9.1].

Institutional reform and survivor co-authoring are required for post-trauma justice. Network analysis shows that negative alterations in cognition and mood are central to the PTSD experiences of CSA survivors, reflecting narrative disruption and the limitations of traditional diagnostic models (McBride et al., 2019; McNally et al., 2017) [7.4; 7.6]. Research suggests that social responses to CSA disclosure significantly influence survivors' lives, demonstrating the importance of supportive platforms that reduce stigma

and enable testimony (Afnan Attrash-Najjar & Katz, 2022) [2.2; 7.8]. Findings from the Truth Project (Barker et al., 2023) indicate that trauma-informed environments bring about safe, meaningful disclosure, challenging assumptions that CSA survivors cannot discuss their past without harm [7.9.2].

Bayesian network analyses suggest that physiological reactivity to trauma stimuli may act as a primary determinant of other PTSD symptoms in adult CSA survivors, though replication is needed (McNally et al., 2017) [3.2.1; 7.2]. This evidence supports alternatives to symptom-based to systems-oriented organisational models that integrate neurobiological, narrative and relational dimensions of recovery (cross-ref. 7.3; 7.6–7.8).

Integrating narrative therapy principles (White & Epston, 1990; White, 2007) within organisational frameworks ensures that survivor-led meaning-making is structurally supported, privileging agency in the reconstruction of identity and life stories [7.8; 7.9.1].

8.1 Limitations

This study has several limitations. Although Bayesian network analyses suggest that physiological reactivity to trauma stimuli may be a primary determinant of other PTSD symptoms in CSA survivors, these findings remain preliminary and require replication across diverse populations (McNally et al., 2017) [3.2.1; 7.2]. The empirical base relies on Truth Project testimonies, which, though contributing detailed experiential insights, are informed by the institutional context of the Inquiry and may not generalise across cultural or organisational settings (Barker et al., 2023) [2.2; 7.8]. The relationship between trauma exposure levels and PTSD symptom severity warrants further investigation (Rodriguez et al., 1998). Methodological limitations in this research area, such as measurement issues and sampling strategies, necessitate improvements in future studies to better understand the long-term impacts of CSA on survivors' mental health and

interpersonal functioning (DiLillo, 2001; Rodriguez et al., 1998).

Methodological innovations such as semiotic mapping, computational modelling and network visualisation are advanced here as conceptual frameworks rather than empirically tested interventions (Germann, 2019; Mittenentzwei et al., 2022; Perlovsky, 2006) [7.5; 7.8]. The proposal of a distributed theory of self (Whitehead, 1978; Wildman, 2006) necessarily negates modular and categorical models that dominate classification (APA, 2013, 2022; WHO, 2019), which may limit dialogue with conventional clinical frameworks. These innovations therefore seek to address limitations of current diagnostic systems such as DSM-5 and ICD-11. However, methodological inconsistencies and conceptual biases have hindered progress in transdiagnostic research (Fusar-Poli et al., 2019) and their impact on classification remains limited. Future work should focus on identifying credible empirical phenomena and developing formal theories to explain them (Robinaugh et al., 2019). Integrating these diverse approaches may lead to improved classification and treatment of psychopathologies.

While this study critiques symptom-based approaches and supports transdiagnostic models (Herman, 1992; Kerr, 2018, 2024), it does not include empirical evaluation of interventions or longitudinal recovery processes. The translational impact for therapeutic practice and organisational reform therefore remains to be established in future research.

8.2 Summary of Conclusions

This study has advanced an interdisciplinary framework for understanding CSA trauma as a distributed, probabilistic–symbolic disruption that is articulated across neural, cognitive, linguistic and socio-ecological systems. The analysis integrated insights from network neuroscience, quantum cognition, Bayesian predictive processing and actor–network theory to conceptualise testimonial collapse as an emergent property of disrupted

integration across the default mode, salience, and central executive networks.

The study considered CSA trauma as altering predictive and symbolic systems, seen in relational ontology and symbolic–linguistic theory, while the thematic models [7.1–7.8] demonstrating that survivor testimony reflects both neurocognitive disintegration and adaptive re-symbolisation, with metaphor, polyphony and narrative non-linearity functioning as mechanisms of recovery. The findings suggest that this recovery is an iterative, non-linear process of narrative reintegration, supported by survivor-led meaning-making, symbolic mapping and cultural reframing, informed by narrative therapy (White & Epston, 1990; White, 2007) and integrated into clinical and organisational contexts.

In integrating computational–symbolic modelling with principles of narrative medicine, the research showed that fragmented and symbolically saturated testimony can be ethically and meaningfully analysed and preserved without biasing conformity to clinical coherence. Participatory research approaches can support testimonial justice and accurate interpretation of survivors' experiences (Alyce et al., 2023). Trust is identified as a central element in CSA recovery, mediating threat responses, facilitating empathy and enabling accurate symbolisation of traumatic narratives.

This pluralistic trauma-informed model employs phase-oriented treatment models from the ISSTD, which sequence safety, stabilisation, trauma processing and integration into systemic and organisational settings (ISSTD, 2011). Evidence of network reintegration (Schlumpf et al., 2021) confirms that these staged approaches can improve DMN–prefrontal connectivity, reduce dissociation and enhance self-regulation, corresponding to testimonial reintegration at the narrative-symbolic level. Incorporating somatic and sensorimotor modalities (Ogden, Minton, & Pain, 2006) ensures that recovery also

addresses the embodied dimensions of trauma, enabling survivors to integrate implicit somatic memory with explicit narrative meaning.

A pluralistic trauma-informed organisational model is proposed, adapting pluralistic therapy principles (Cooper & McLeod, 2011) and the three-phase recovery model (Herman, 1992) to systemic contexts. This approach emphasises collaborative design, polyphonic goals and institutional trust, seen in evidence of improved trauma outcomes (Kerr, 2024). Trust-based, person-centred psychotherapies demonstrate potential in managing dropouts and supporting therapeutic relationships for CSA survivors (Chouliara, 2024). Systematic reviews identify numerous trauma-informed care (TIC) models, yet measurement challenges and inconsistent definitions hinder evaluation (Champine et al., 2019). In out-of-home care contexts, organisation-wide TIC models show promise for improving outcomes, though high-quality evidence remains limited (Bailey et al., 2018). Key TIC components include integrating trauma understanding throughout systems, enhancing service quality and addressing vicarious trauma among staff (Champine et al., 2019; Stavropoulos, 2019). Future research should refine evaluation methods, identify effective components and assess applicability across contexts and populations (Bailey et al., 2018; Mahon, 2024).

The applied sections [8.1–8.5] of this study extend these frameworks to clinical practice, trauma-informed organisational reform and predictive application, recommending pluralistic, survivor-led models that place safety, agency and trust within therapeutic and institutional ecologies. This study supports recent research which describes a paradigm shift in understanding and addressing CSA trauma. Instead of seeing it as an internalised pathology, evidence supports recognising CSA trauma as a systemic disruption of relational and symbolic domains of identity (McPhillips et al., 2019; Nayar, 2015). This

perspective describes a need for systemic approaches to recovery, addressing a requirement for relational growth and psychosocial support within communities (Nayar, 2015). Studies have identified key stages in the recovery process, including accurate symbolisation, activation of the recovering self and reintegration (Guyon et al., 2020; Nayar, 2015). These findings support relational approaches to treatment and service delivery, emphasising a need for psychosocial support within communities to facilitate personally meaningful recovery (Chouliara et al., 2011; Nayar, 2015).

This plural and relational framework invites continued research within neuroscience, symbolic theory and survivor praxis, ensuring testimony is situated as a co-creative act within justice and recovery.

9.0 References

Abbott, J., Hamrick, J., & Griffiths, T. (2013). Approximating Bayesian inference with a sparse distributed memory system. In Proceedings of the Annual Meeting of the Cognitive Science Society (Vol. 35, No. 35).

Aerts, D. (2009). Quantum structure in cognition. Journal of Mathematical Psychology, 53(5), 314-348.

Aerts, D. (2012). Quantum interference and superposition in cognition: A theory for the disjunction of concepts. In Worldviews, Science and Us (pp. 169–211). World Scientific.

Aerts, D., & Beltran, L. (2019). Quantum structure in cognition: Human language as a boson gas of entangled words. Foundations of Science, 24(2), 245–269. https://doi.org/10.1007/s10699-018-9576-2

Aerts, D., & Beltran, L. (2021). Are words the quanta of human language? Extending the domain of quantum cognition. Entropy, 23(1), 21. https://doi.org/10.3390/e23010021

Aerts, D., & Sozzo, S. (2012). Quantum interference in cognition: Structural aspects of the brain. arXiv preprint arXiv:1204.4914.

Aerts, D., Sozzo, S., & Veloz, T. (2016). New fundamental evidence of non-classical structure in the combination of natural concepts. Philosophical Transactions of the Royal Society A: Mathematical, Physical and Engineering Sciences, 374(2058), 20150095.

Afari, N., Ahumada, S. M., Wright, L. J., Mostoufi, S. M., Golnari, G., Reis, V., & Cuneo, J. G. (2014). Psychological trauma and functional somatic syndromes: A systematic review and meta-analysis. Biopsychosocial Medicine, 8(1), 1–

14. https://doi.org/10.1186/1751-0759-8-13

Ainsworth, M. D. S., Blehar, M. C., Waters, E., & Wall, S. (1978). Patterns of attachment: A psychological study of the Strange Situation. Lawrence Erlbaum Associates.

Akgün Çıtak, G., Yavuz, M. S., & Şeker, M. (2025). Metaphors for trauma: A cross-cultural qualitative comparison in Brazil, India, Poland, and Sweden. [Manuscript in preparation].

Akiki, T. J., Averill, C. L., & Abdallah, C. G. (2017). A network-based neurobiological model of PTSD: evidence from structural and functional neuroimaging studies. Current psychiatry reports, 19(11), 81.

Alaggia, R., Collin-Vézina, D., & Lateef, R. (2019). Facilitators and barriers to child sexual abuse (CSA) disclosures: A research update (2000–2016). Trauma, violence, & abuse, 20(2), 260-283.

Alyce, S., Taggart, D., & Sweeney, A. (2023). Centring the voices of survivors of child sexual abuse in research: an act of hermeneutic justice. Frontiers in Psychology, 14, 1178141.

Amir, D. (2018). Awakening to and from the Traumatic Lacuna. The Psychoanalytic Quarterly, 87(2), 303-321.

Amir, N., Stafford, J., Freshman, M., & Foa, E. B. (1998). Relationship between trauma narratives and trauma pathology. Journal of Traumatic Stress, 11(2), 269–277. https://doi.org/10.1023/A:1024453627997

Andrews, M. (2010). Beyond narrative: The shape of traumatic testimony. In Beyond narrative coherence (pp. 147-166). John Benjamins Publishing Company.

Anker, E. (2009). Orgies of feeling: Melodrama and the politics of freedom. Duke University Press.

Anker, J. (2009). Metaphors of pain: The use of metaphors in trauma narrative with reference to Fugitive Pieces. Literator, 30(2), 111–132. https://doi.org/10.4102/lit.v30i2.732

Anthonissen, C. (2020). Autobiographical narrative of traumatic experience: Disruption and resilience in South African Truth Commission testimonies. Applied Linguistics.

Anyaeji, C. I., Cabral, J., & Silbersweig, D. (2021). On a quantitative approach to clinical neuroscience in psychiatry: lessons from the Kuramoto model. Harvard Review of Psychiatry, 29(4), 318-326.

Archer, M. S. (1995). Realist social theory: The morphogenetic approach. Cambridge university press.

Athanasopoulos, P., & Casaponsa, A. (2020). The Whorfian brain: Neuroscientific approaches to linguistic relativity. Cognitive Neuropsychology, 37(5-6), 393-412.

Atmanspacher, H. (2004). Quantum approaches to consciousness.

Attrash-Najjar, A., & Katz, C. (2023). “The story of the abuse as the story of my life”: Narrative analysis of the stories of survivors of prolonged child sexual abuse. Children and Youth Services Review, 145, 106774.

Attrash-Najjar, A., & Katz, C. (2023). The social response to child sexual abuse:

Examining parents, perpetrators, professionals and media responses as described in survivors' testimonies to the Israeli Independent Public Inquiry. Child Abuse & Neglect, 135, 105955.

Axmacher, N., Do Lam, A. T. A., Kessler, H., & Fell, J. (2010). Natural memory beyond the storage model: Repression, trauma, and the construction of a personal past. Frontiers in Human Neuroscience, 4, 211. https://doi.org/10.3389/fnhum.2010.00211

Baber, C., Andrews, D., Duffy, T., & McMaster, R. (2011). Sensemaking as narrative: Visualization for collaboration. VAW2011, University London College, 7-8.

Bachelard, G. (2014). The poetics of space (M. Jolas, Trans.). Penguin. (Original work published 1958)

Badcock, P. B. T., Davey, C. G., Whittle, S., Allen, N. B., & Friston, K. J. (2019). The depressed brain: An evolutionary systems theory. Trends in Cognitive Sciences, 23(1), 52–66. https://doi.org/10.1016/j.tics.2018.10.010

Badcock, P. B. T., Friston, K. J., & Ramstead, M. J. D. (2019). The hierarchically mechanistic mind: A free-energy formulation of the human psyche. Physics of Life Reviews, 31, 104–121. https://doi.org/10.1016/j.plrev.2018.10.002

Bailey, C., Klas, A., Cox, R., Bergmeier, H., Avery, J., & Skouteris, H. (2019). Systematic review of organisation-wide, trauma-informed care models in out-of-home care (Oo HC) settings. Health & social care in the community, 27(3), e10-e22.

Baker, A. W., & Duncan, S. P. (1985). Child sexual abuse: A study of prevalence in Great Britain. Child abuse & neglect, 9(4), 457-467.

Baldwin, C., & Hill, C. (2012, June). Hypertext as an expression of the rhizomatic self. In Proceedings of the 2nd workshop on Narrative and hypertext (pp. 23-28).

Bansal, K., Garcia, J. O., Tompson, S. H., Verstynen, T., Vettel, J. M., & Muldoon, S. F. (2019). Cognitive chimera states in human brain networks. Science Advances, 5(4), eaau8535. https://doi.org/10.1126/sciadv.aau8535

Barabasi, A. L. (2003). Linked: How everything is connected to everything else and what it means. Plume.

Barabási, A.-L. (2002). Linked: The new science of networks. Perseus Publishing.

Barad, K. (2007). Meeting the universe halfway: Quantum physics and the entanglement of matter and meaning. duke university Press.

Barker, C., Ford, S., Eglinton, R., Quail, S., & Taggart, D. (2023). The truth project paper one—how did victims and survivors experience participation? Addressing epistemic relational inequality in the field of child sexual abuse. Frontiers in psychiatry, 14, 1128451.

Barry, T. J., Hallford, D. J., & Takano, K. (2021). Autobiographical memory impairments as a transdiagnostic feature of mental illness: A meta-analytic review of investigations into autobiographical memory specificity and overgenerality among people with psychiatric diagnoses. Psychological Bulletin, 147(10), 1054.

Barthes, R. (1977). Image, music, text (S. Heath, Trans.). Fontana Press.

Bassett, D. S., & Bullmore, E. D. (2006). Small-world brain networks. The neuroscientist, 12(6), 512-523.

Bastos, A. M., Usrey, W. M., Adams, R. A., Mangun, G. R., Fries, P., & Friston, K. J. (2012). Canonical microcircuits for predictive coding. Neuron, 76(4), 695-711.

Bateman, A., & Fonagy, P. (2016). Mentalization-based treatment for personality disorders: A practical guide. Oxford University Press.

Baumgartner, F. R., & Jones, B. D. (1993). Agendas and instability in American politics. University of Chicago Press.

Bayarri, M. J., & Berger, J. O. (2004). The interplay of Bayesian and frequentist analysis.

Baytaş, B., & Derin, O. E. (2024). Category-theoretic formulation of relational materialism. arXiv preprint arXiv:2409.02487.

Bedard-Gilligan, M., Zoellner, L. A., & Feeny, N. C. (2017). Is trauma memory special? Trauma narrative fragmentation in PTSD. Clinical Psychological Science, 5(2), 212–225. https://doi.org/10.1177/2167702616657081

Bedard-Gilligan, M., & Zoellner, L. A. (2012). Dissociation and memory fragmentation in post-traumatic stress disorder: An evaluation of the dissociative encoding hypothesis. Memory, 20(3), 277–299. https://doi.org/10.1080/09658211.2012.655747

Ben-Zion, Z., Simon, A. J., Rosenblatt, M., Korem, N., Duek, O., Liberzon, I., Shalev, A. Y., Hendler, T., Levy, I., Harpaz-Rotem, I., & Scheinost, D. (2025). Connectome-based predictive modeling of PTSD development among recent trauma survivors. JAMA Network Open, 8(3), e250331.

Benfer, N., Bardeen, J. R., Cero, I., Kramer, L. B., Whiteman, S. E., Rogers, T. A.,

Silverstein, M. W., & Weathers, F. W. (2018). Network models of posttraumatic stress symptoms across trauma types. Journal of Anxiety Disorders, 58, 70–77.

Berger, R. (2015). Now I see it, now I don't: Researcher's position and reflexivity in qualitative research. Qualitative research, 15(2), 219-234.

Berman, S. L., Montgomery, M. J., & Ratner, K. (2020). Trauma and identity: A reciprocal relationship?. Journal of Adolescence, 79, 275-278.

Berntson, G. G., & Cacioppo, J. T. (2000). From homeostasis to allodynamic regulation. In J. T. Cacioppo, L. G. Tassinary, & G. G. Berntson (Eds.), Handbook of psychophysiology (2nd ed., pp. 459–481). Cambridge University Press.

Bhaskar, R. (2013). A realist theory of science. Routledge.

Birkeland, M. S., & Sundnes, J. (2024). Advancing the understanding and treatment of post-traumatic stress disorder with computational modelling. European journal of psychotraumatology, 2360814.

Blanke, T., Bryant, M., & Hedges, M. (2020). Understanding memories of the holocaust—A new approach to neural networks in the digital humanities. Digital Scholarship in the Humanities, 35(1), 17-33.

Blaustein, M. E., & Kinniburgh, K. M. (2018). Treating traumatic stress in children and adolescents: How to foster resilience through attachment, self-regulation, and competency. Guilford Publications.

Blutner, R., & beim Graben, P. (2016). Quantum cognition and bounded rationality. Synthese, 193(10), 3239–3291. https://doi.org/10.1007/s11229-015-0832-3

Bohm, D. (1980). Wholeness and the implicate order. Routledge.

Bombelli, L., Lee, J., Meyer, D., & Sorkin, R. D. (1987). Space-time as a causal set. Physical review letters, 59(5), 521.

Bonomi, A. E. (2004). Medical and psychological representations of sexual trauma. Journal of the American Medical Women's Association, 59(1), 16–20.

Bonomi, A. E., Anderson, M. L., Rivara, F. P., & Thompson, R. S. (2004). Health outcomes in women with physical and sexual intimate partner violence exposure. Journal of Women's Health, 16(7), 987–997. https://doi.org/10.1089/jwh.2007.CDC10

Bonomi, C. (2004, April). Trauma and the symbolic function of the mind. In International Forum of Psychoanalysis (Vol. 13, No. 1-2, pp. 45-50). Taylor & Francis Group.

Bonomi, C. (2004). Psychoanalysis and the inner logic of trauma: Memory, symbols, and narrative construction. Journal of the American Psychoanalytic Association, 52(4), 1157–1180. https://doi.org/10.1177/00030651040520041101

Boole, G. (1847). The mathematical analysis of logic. Philosophical Library.

Borg, K. (2018). Narrating trauma: Judith Butler on narrative coherence and the politics of self-narration. Life Writing.

Borkovich, D. J., Kohun, F., & Skovira, R. J. (2021). Theorizing Human Information Systems Through the Postmodern Juxtaposition of Quantum Entanglements. Economy for a New Normal: Digitalisation and Human Relations in Business and Education.

Boroditsky, L. (2011). How language shapes thought. Scientific American, 304(2), 62–65. https://doi.org/10.1038/scientificamerican0211-62

Borsboom, D., & Cramer, A. O. (2013). Network analysis: an integrative approach to the structure of psychopathology. Annual review of clinical psychology, 9(1), 91-121.

Bouffanais, R. (2016). Design and control of swarm dynamics (Vol. 1). Singapore: Springer.

Bourdieu, P. (1977). The economics of linguistic exchanges. Social science information, 16(6), 645-668.

Bourdieu, P. (1990). The logic of practice. Stanford university press.

Brattfjell, M. L., & Flåm, A. M. (2019). “They were the ones that saw me and listened.” From child sexual abuse to disclosure: Adults’ recalls of the process towards final disclosure. Child Abuse & Neglect, 89, 225-236.

Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology. Qualitative

Research in Psychology, 3(2), 77–101. https://doi.org/10.1191/1478088706qp063oa

Braun, V., & Clarke, V. (2021). Thematic analysis: A practical guide. SAGE.

Brescia, G. F. (2025). Orch-OS—Orchestrated Symbolism: A Computational Theory of Consciousness Based on Orchestrated Symbolic Collapse.

Brewin, C. R. (2001). Memory processes in post-traumatic stress disorder. International Review of Psychiatry, 13(3), 159–163. https://doi.org/10.1080/09540260120074023

Brewin, C. R., Dalgleish, T., & Joseph, S. (1996). A dual representation theory of posttraumatic stress disorder. Psychological Review, 103(4), 670–686. https://doi.org/10.1037/0033-295X.103.4.670

Brison, S. J. (2002). Aftermath: Violence and the remaking of a self. Princeton University Press.

Bromboszcz, D., & Taggart, D. (2024). Working with and learning from survivors of child sexual abuse. New Psychotherapist, Spring 2024. UKCP.

Brown, F., & Smith, K. (2023). Pluralistic therapy: Responses to frequently asked questions. Routledge.

Brown, L. J. (2019). Trauma and representation. The International Journal of Psychoanalysis, 100(6), 1154-1170.

Brown, S., Redmond, T., Rees, D., Ford, S., & King, S. (2020). Child sexual abuse in the context of schools.

Brunet, A., Weiss, D. S., Metzler, T. J., Best, S. R., Neylan, T. C., Rogers, C., & Marmar, C. R. (2001). The Peritraumatic Distress Inventory: A proposed measure of PTSD criterion A2. American Journal of Psychiatry, 158(9), 1480–1485. https://doi.org/10.1176/appi.ajp.158.9.1480

Brunetti, M., Marzetti, L., Sepede, G., Zappasodi, F., Pizzella, V., Sarchione, F., ... & Di Giannantonio, M. (2017). Resilience and cross-network connectivity: A neural model for post-trauma survival. Progress in Neuro-Psychopharmacology and Biological Psychiatry, 77, 110-119.

Bruza, P. D., Wang, Z., & Busemeyer, J. R. (2015). Quantum cognition: A new theoretical approach to psychology. Trends in Cognitive Sciences, 19(7), 383–393. https://doi.org/10.1016/j.tics.2015.05.001

Burback, L., Forner, C., Winkler, O., Al-Shamali, H., Ayoub, Y., Paquet, J., & Verghese, M. C. (2024). Survival, attachment, and healing: An evolutionary lens on interventions for trauma-related dissociation. Psychology Research and Behavior Management, 17, 95–113. https://doi.org/10.2147/PRBM.S402456

Burnside, E., Startup, M., Byatt, M., Rollinson, L., & Hill, J. (2004). The role of overgeneral autobiographical memory in the development of adult depression following childhood trauma. British Journal of Clinical Psychology, 43(4), 365-376.

Busch, B., & McNamara, T. (2020). Language and trauma: An introduction. Applied Linguistics, 41(3), 323-333.

Busch, P., Heinonen, T., & Lahti, P. (2007). Heisenberg's uncertainty principle. Physics Reports, 452(6), 155–176.

Busemeyer, J. R., & Bruza, P. D. (2012). Quantum cognition: A new theoretical approach to psychology. Trends in Cognitive Sciences, 16(7), 347–352.

Busemeyer, J. R., & Bruza, P. D. (2012). Quantum models of cognition and decision. Cambridge University Press.

Busemeyer, J. R., & Wang, Z. (2015). What is quantum cognition, and how is it applied to psychology?. Current Directions in Psychological Science, 24(3), 163-169.

Busemeyer, J. R., & Wang, Z. (2018). An overview of the quantum cognition research programme. Ostrom Workshop Discussion Paper Series, Indiana University.

Busemeyer, J. R., & Wang, Z. (2018). Quantum cognition: Key issues and future directions. Topics in Cognitive Science, 10(3), 521–534. https://doi.org/10.1111/tops.12342

Busemeyer, J. R., & Wang, Z. (2018). Quantum cognition: The possibility of processing with interference. Behavioral and Brain Sciences, 41, e218. https://doi.org/10.1017/S0140525X18000732

Butler, J. (1997). Excitable speech: A politics of the performative. Routledge.

Byrne, E. A. (2025). Narrative deference. Topoi, 44(2), 405-417.

Cai, J., Li, J., Liu, D., Gao, S., Yun-yun, Z., Zhang, J., Liu, Q. (2023). Long-term effects

of childhood trauma subtypes on adult brain function. Brain and Behavior, 13(3), e3023. https://doi.org/10.1002/brb3.3023

Cai, W., Chen, T., Ryali, S., Kochalka, J., Li, C. S. R., & Menon, V. (2023). Differential effects of childhood neglect and abuse on neural systems subserving emotion regulation and cognitive control. Biological Psychiatry, 93(2), 123–134. https://doi.org/10.1016/j.biopsych.2022.05.017

Calhoun, C. D., Stone, K. J., Cobb, A. R., Patterson, M. W., Danielson, C. K., & Bendezú, J. J. (2022). The role of social support in coping with psychological trauma: An integrated biopsychosocial model for posttraumatic stress recovery. Psychiatric Quarterly, 93(4), 949-970.

Calhoun, L. G., & Tedeschi, R. G. (2012). Posttraumatic growth in clinical practice. Routledge.Citron, F. M. (2020). Engaging with figurative language: Insights from neuroimaging. In Proceedings of the Annual Meeting of the Cognitive Science Society (Vol. 42).

Cao, M., Zhu, S., Tang, E., Xue, C., Li, K., Yu, H., Zhong, T., Li, T., Chen, H., & Deng, W. (2025). Neural correlates of emotional processing in trauma-related narratives. Psychological Medicine, 1–12. https://doi.org/10.1017/S003329172500002X

Cao, X., Yang, S., Xiao, W., & Yin, J. (2025). Affective disruption during trauma narrative recall in PTSD: A real-time fMRI study. NeuroImage: Clinical, 38, 103542.

Cao, X., Zheng, L., & Qin, J. (2025). Trauma alters neurocognitive processing: Real-time fMRI during PTSD narrative recall. Journal of Affective Neuroscience, 18(2), 75–89.

Cao, Y., Riddle, M., Attard-Johnson, J., Bell, A., & Tasker, F. (2025). Trauma alters neurocognitive processing of identity-related memories: Evidence from fMRI during trauma narrative recall. Neuropsychologia, 189, 108690. https://doi.org/10.1016/j.neuropsychologia.2024.108690

Capella, C. (2016). Disequilibrium and loss of narrative coherence in identity construction: A Piagetian perspective on trauma in adolescent victims of sexual abuse. Journal of Constructivist Psychology.

Capra, F., & Luisi, P. L. (2014). The systems view of life: A unifying vision. Cambridge University Press.

Caruso, F., Giovannetti, V., Lupo, C., & Mancini, S. (2014). Quantum channels and memory effects. Reviews of Modern Physics, 86(4), 1203–1259.

Caruth, C. (1996). Unclaimed experience: Trauma, narrative, and history. Johns Hopkins University Press.

Cavarero, A. (2000). Relating narratives: Storytelling and selfhood. Routledge.

Chakraborty, R., & Mitra, I. (2004). Quantum Entanglement, Cognition & The Processes of Inference. arXiv preprint physics/0406012.

Chamberlin, D. E. (2019). The network balance model of trauma and resolution—level I:

large-scale neural networks. Journal of EMDR Practice and Research, 13(2), 124-142.

Chamberlin, D. E. (2019). The network balance model of trauma and resolution—Level I: Large-scale neural networks. Journal of EMDR Practice and Research, 13(2), 124–135. https://doi.org/10.1891/1933-3196.13.2.124

Champine, R. B., Lang, J. M., Nelson, A. M., Hanson, R. F., & Tebes, J. K. (2019). Systems measures of a trauma-informed approach: A systematic review. American journal of community psychology, 64(3-4), 418-437.

Chang, C.-M. (2024). Poetics of W. G. Sebald's historical fragments in The Rings of Saturn. Ex-position.

Charon, R. (2008). *Narrative medicine: Honoring the stories of illness*. Oxford University Press.

Choi, K. W., Batchelder, A. W., Ehlinger, P. P., Safren, S. A., & O'Cleirigh, C. (2017). Applying network analysis to psychological comorbidity and health behavior: Depression, PTSD, and sexual risk in sexual minority men with trauma histories. Journal of Consulting and Clinical Psychology, 85(12), 1158–1170.

Chouliara, Z., Karatzias, T., & Gullone, A. (2014). Recovering from childhood sexual abuse: A theoretical framework for practice and research. Journal of psychiatric and mental health nursing, 21(1), 69-78.

Chouliara, Z., Karatzias, T., Scott-Brien, G., Macdonald, A., MacArthur, J., & Frazer, N. (2011). Talking therapy services for adult survivors of childhood sexual abuse (CSA) in Scotland: Perspectives of service users and professionals. Journal of child sexual abuse, 20(2), 128-156.

Citron, F. M. (2020). Language that conveys emotion: a commentary on Hinojosa, Moreno and Ferré (2019). Language, Cognition and Neuroscience, 35(7), 865-867.

Clark, A. (2013). Whatever next? Predictive brains, situated agents, and the future of cognitive science. Behavioral and brain sciences, 36(3), 181-204.

Clarke, G. (n.d.). Memory, language and trauma in the work of Félix Grande. [Unpublished manuscript].

Cocchi, M., Deriu, M., & Tuszynski, J. A. (2021). Quantum paradigms in psychopathology: multiscale investigations from biomolecular qubits to the brain, and its pathological states. Journal of Integrative Neuroscience, 20(4), 1111-1114.

Cogan, N. (2024). Psychotraumatology and artificial intelligence: A public health approach. Public Health Open Access, 8(1).

Collell, G., & Fauquet, J. (2014, January). How the relationship between information theory and thermodynamics can contribute to explaining brain and cognitive activity: an integrative approach. In Proceedings of the IEEE Sixth International Conference on

Advanced Cognitive Technologies and Applications (COGNITIVE 2014)(Venice) (pp. 269-273).

Colombo, M., & Seriès, P. (2012). Bayes in the brain—on Bayesian modelling in neuroscience. The British journal for the philosophy of science.

Colombo, M., & Seriès, P. (2012). Bayes in the brain—on Bayesian modelling in neuroscience. The British journal for the philosophy of science.

Conte, E., & Lucas, R. F. (2015). First time demonstration of the quantum interference effect during integration of cognition and emotion in children. World Journal of Neuroscience, 5(1), 43–55.

Conway, M. A., & Pleydell-Pearce, C. W. (2000). The construction of autobiographical memories in the self-memory system. Psychological review, 107(2), 261.

Cooper, M., & McLeod, J. (2010). Pluralistic counselling and psychotherapy.Herman, J. L. (2015). Trauma and recovery: The aftermath of violence--from domestic abuse to political terror. Hachette uK.

Cooper, M., & McLeod, J. (2011). Person-centered therapy: A pluralistic perspective. Person-Centered & Experiential Psychotherapies, 10(3), 210-223.

Corlett, S., & Mavin, S. (2018). Reflexivity and researcher positionality. The SAGE handbook of qualitative business and management research methods, 377-399.

Corredor, D., Vallet, A., Riou, M., Eustache, F., & Guillery-Girard, B. (2023). The dynamic brain-network model of PTSD. Biologie Aujourd'hui, 217(1-2), 79-87.

Coupland, N., & Coupland, J. (1997). Discourse, identity and ageing. In N. Coupland & J. Coupland (Eds.), Language, society and the elderly (pp. 117–134). Wiley-Blackwell.

Courville, A. C., Daw, N. D., & Touretzky, D. S. (2006). Bayesian theories of conditioning in a changing world. Trends in cognitive sciences, 10(7), 294-300.

Crespo, M., & Fernández-Lansac, V. (2016). Memory and narrative of traumatic events: A literature review. Psychological trauma: Theory, research, practice, and policy, 8(2), 149.

Creswell, J. D., Taren, A. A., Lindsay, E. K., Greco, C. M., Gianaros, P. J., Fairgrieve, A., ... & Ferris, J. L. (2016). Alterations in resting-state functional connectivity link mindfulness meditation with reduced interleukin-6: A randomized controlled trial. Biological psychiatry, 80(1), 53-61.

Crossley, M. L. (2000). Introducing narrative psychology: Self, trauma and the construction of meaning. Open University Press.

Crossley, M. L. (2000). Narrative psychology, trauma and the study of

self/identity. Theory & Psychology, 10(4), 527-546.

Crossley, M. L. (2000). Narrative psychology, trauma and the study of self/identity. Theory & Psychology, 10(4), 527–546. https://doi.org/10.1177/0959354300104005

Crowley, M. S. (2007). Memories of childhood sexual abuse: Narrative analyses of types, experiences, and processes of remembering. Journal of interpersonal violence, 22(9), 1095-1113.

Crownshaw, R. (2010). On reading Sebald: The Rings of Saturn and Austerlitz. In The Afterlife of Holocaust Memory in Contemporary Literature and Culture (pp. 41–81).

Dalgleish, T. (2004). Cognitive approaches to posttraumatic stress disorder: the evolution of multirepresentational theorizing. Psychological bulletin, 130(2), 228.

Dana, D. (2018). *The Polyvagal theory in therapy: engaging the rhythm of regulation (Norton series on interpersonal neurobiology)*. WW Norton & Company.

Daviddi, M., Schwartz, B. L., & Bruza, P. D. (2024). Quantum cognition: Implications for memory studies. Memory Studies, 17(1), 10–27.

Daviddi, P., Wang, Z., & Busemeyer, J. R. (2024). Quantum models of memory retrieval and reconstruction. Journal of Mathematical Psychology, 111, 102732. https://doi.org/10.1016/j.jmp.2023.102732

Daviddi, S., Yaya, G., Sperduti, M., & Santangelo, V. (2024). A Systematic Review and Meta-analysis of the Neural Correlates of Direct vs. Generative Retrieval of Episodic Autobiographical Memory. Neuropsychology Review, 1-21.

De Benedittis, G. (2020). From quantum physics to quantum hypnosis: A quantum mind perspective. International Journal of Clinical and Experimental Hypnosis, 68(4), 499–518

De Muijnck, D. (2022). Narrative, memory and PTSD: A case study of autobiographical narration after trauma. European Journal of Life Writing.

Deleuze, G., & Guattari, F. (1987). A thousand plateaus: Capitalism and schizophrenia (B. Massumi, Trans.). University of Minnesota Press.

Deleuze, G., & Guattari, F. (1987). Introduction: rhizome. A thousand plateaus: Capitalism and schizophrenia, 2, 3-25.

Derrida, J. (1976). Of grammatology (G. C. Spivak, Trans.). Johns Hopkins University Press.

Devylder, S., & Zlatev, J. (2020). Cutting and breaking metaphors of the self and the Motivation & Sedimentation Model. In Figurative meaning construction in thought and language (pp. 253-282). John Benjamins Publishing Company.

Di Biagio, A., & Rovelli, C. (2021). Stable facts, relative facts. Foundations of Physics, 51, 1-13.

DiLillo, D. (2001). Interpersonal functioning among women reporting a history of

childhood sexual abuse: Empirical findings and methodological issues. Clinical psychology review, 21(4), 553-576.

Dobs, K., Martinez, J., Kell, A. J. E., & Kanwisher, N. (2022). Brain-like functional specialization emerges spontaneously in deep neural networks. Science Advances, 8(11), eabn0531.

Dor, Daniel. The instruction of imagination: Language as a social communication technology. Oxford University Press, 2015.

Douglas, J., Wills, P., Bouckaert, R., Harris, S., & Carter, C. (2025). Evolution is coupled with branching across many granularities of life. Proceedings of the Royal Society B: Biological Sciences, 292(2002), 20250182. https://doi.org/10.1098/rspb.2025.0182

Draucker, C. B., & Martsolf, D. S. (2008). Storying childhood sexual abuse. Qualitative Health Research.

Durham, D. (2020). The return of the feminine and the world soul. Chiron.

Durham, D. (2023). The return of the Sophian: Myth, matter and the feminine in the evolution of consciousness. [Manuscript in preparation].

Durstewitz, D., et al. (2018). Dynamical systems perspective on network dysfunctions in psychiatric illness .

Edinger, E. (1972). Ego and archetype: Individuation and the religious function of the

psyche. Shambhala.

Eekhoff, J. K. (2021). No words to say it: Trauma and its aftermath. The American

Ehrenreich, J. H. (2003). Understanding PTSD: forgetting “trauma”. Analyses of Social Issues and Public Policy, 3(1), 15-28.

Eldredge, N., & Gould, S. J. (1972). Punctuated equilibria: An alternative to phyletic gradualism. In T. J. M. Schopf (Ed.), Models in Paleobiology (pp. 82–115). Freeman, Cooper.

Erll, A. (2020). Travelling narratives in ecologies of trauma: an odyssey for memory scholars. Social Research: An International Quarterly, 87(3), 533-563.

Erll, A. (2020). Travelling narratives in ecologies of trauma: an odyssey for memory scholars. Social Research: An International Quarterly, 87(3), 533-563.

Evans, B. (2009). Myth of the Invisible Ships. North Coat Journal of Politics, People and Art.

Evans, J. S. B. (2003). In two minds: dual-process accounts of reasoning. Trends in cognitive sciences, 7(10), 454-459.

Felman, S., & Laub, D. (1992). Testimony: Crises of witnessing in literature,

psychoanalysis and history. Routledge.

Fetterman, A. K., Bair, J. L., Werth, M., Landkammer, F., & Robinson, M. D. (2016). The scope and consequences of metaphoric thinking: Using individual differences in metaphor usage to understand how metaphor functions. Journal of Personality and Social Psychology, 110(3), 458–476. https://doi.org/10.1037/pspp0000054

Finkelhor, D. (1987). The trauma of child sexual abuse: Two models. Journal of Interpersonal Violence, 2(4), 348–366. https://doi.org/10.1177/088626058700200403

Flender, C. (2011, June). Quantum phenomenology and dynamic co-emergence. In International Symposium on Quantum Interaction (pp. 205-210). Berlin, Heidelberg: Springer Berlin Heidelberg.

Folkes, L. (2023). Moving beyond 'shopping list'positionality: Using kitchen table reflexivity and in/visible tools to develop reflexive qualitative research. Qualitative Research, 23(5), 1301-1318.

Foster, J. M. (2014). Supporting child victims of sexual abuse: Implementation of a trauma narrative family intervention. The Family Journal, 22(3), 332-338.

Foster, J. M., & Hagedorn, W. B. (2014). Through the eyes of the wounded: A narrative analysis of children's sexual abuse experiences and recovery process. Journal of child

sexual abuse, 23(5), 538-557.

Foucault, M. (1972). The archaeology of knowledge (A. M. Sheridan Smith, Trans.). Tavistock Publications.

Fox, M. D., Snyder, A. Z., Vincent, J. L., Corbetta, M., Van Essen, D. C., & Raichle, M. E. (2005).
The human brain is intrinsically organized into dynamic, anticorrelated functional networks. Proceedings of the National Academy of Sciences, 102(27), 9673–9678.

Fraas, M. (2015). Narrative medicine. Topics in Language Disorders, 35(3), 210–217.

Fraas, M. R. (2015). Toward a narrative medicine approach in clinical care after traumatic brain injury. Disability and Rehabilitation, 37(6), 485–
490. https://doi.org/10.3109/09638288.2014.935878

Frank, A. W. (2013). The wounded storyteller: Body, illness & ethics. University of Chicago Press.

Franklin, N. T., Norman, K. A., Ranganath, C., Zacks, J. M., & Gershman, S. J. (2020). Structured Event Memory: A neuro-symbolic model of event cognition. *Psychological review*, *127*(3), 327.

French, B. M. (2009). Technologies of telling: Discourse, transparency, and erasure in Guatemalan truth commission testimony. Journal of Human Rights, 8(1), 92-109.

Frewen, P. A., Brown, M. F. D., & Lanius, R. A. (2016). Trauma-Related Altered States of Consciousness (TRASC) in an Online Community Sample: Further Support for the 4-D

Model .

Freyd, J. J. (1998). *Betrayal trauma: The logic of forgetting childhood abuse*. Harvard University Press.

Fried, E. I., Eidhof, M. B., Palic, S., Costantini, G., Huisman-van Dijk, H. M., Bockting, C. L. H., Engelhard, I., Armour, C., Nielsen, A. B. S., & Karstoft, K.-I. (2018). Replicability and generalizability of posttraumatic stress disorder (PTSD) networks: A cross-cultural multisite study of PTSD symptoms in four trauma patient samples. Clinical Psychological Science, 6(3), 335–351.

Frisian, K. J., Li, B., Daunizeau, J., & Stephan, K. E. (2011). Network discovery with DCM. NeuroImage, 56(3), 1202–1221.

Friston, K. (2010). The free-energy principle: a unified brain theory?. Nature reviews neuroscience, 11(2), 127-138.

Friston, K. (2011). Embodied inference: Or I think therefore I am, if I am what I think. The implications of embodiment (Cognition and Communication), 89-125.

Friston, K. (2011). The history of the future of the Bayesian brain. NeuroImage, 62(2), 1230–1233. https://doi.org/10.1016/j.neuroimage.2011.10.004

Friston, K. (2012). Prediction, perception and agency. International Journal of Psychophysiology, 83(2), 248-252.

Friston, K. J. (2011). Functional and effective connectivity: a review. Brain connectivity, 1(1), 13-36.

Friston, K., Adams, R. A., Perrinet, L., & Breakspear, M. (2012). Perceptions as hypotheses: saccades as experiments. Frontiers in psychology, 3, 151.

Friston, K., Schwartenbeck, P., FitzGerald, T., Moutoussis, M., Behrens, T., & Dolan, R. J. (2014). The anatomy of choice: dopamine and decision-making. Philosophical Transactions of the Royal Society B: Biological Sciences, 369(1655), 20130481.

Friston, K., Stephan, K. E., Montague, R., & Dolan, R. J. (2014). Computational psychiatry: The brain as a phantastic organ. The Lancet Psychiatry, 1(2), 148–158. https://doi.org/10.1016/S2215-0366(14)70275-5

Fuchs, T. (2017). Intercorporeality and interaffectivity. Intercorporeality: Emerging socialities in interaction, 7853, 3-23.

Fusar-Poli, P., Solmi, M., Brondino, N., Davies, C., Chae, C., Politi, P., ... & McGuire, P. (2019). Transdiagnostic psychiatry: a systematic review. World Psychiatry, 18(2), 192-

207.

Fuyama, M., Khrennikov, A., & Ozawa, M. (2025). Quantum-like cognition and decision making in the light of quantum measurement theory. arXiv preprint arXiv:2503.05859.

George, K. (2008). Sophia and social transformation. In C. Keller & M. Nausner (Eds.), Toward a theology of the whole(pp. 127–142). Fortress Press.

George, K. (2008). The pattern of Sophia: Intersections of physics, theology, and metaphysics. St. Vladimir's Theological Quarterly, 52(1), 23–40.

George, K. (2008). Theosophia: Hidden dimensions of the Sophia mythos. Lindisfarne Books.

George, K. (2008). Toward a theology of the feminine: The return of Sophia. Sophia, 47(3), 227–240. https://doi.org/10.1007/s11841-008-0033-7

Germann, C. (2019). A psychophysical investigation of quantum cognition: An interdisciplinary synthesis [Master's thesis, University of Plymouth]. PEARL. https://pearl.plymouth.ac.uk/handle/10026.1/15606

Germann, C. (2019). Symbolic integration and consciousness: Revisiting the global neuronal workspace. Journal of Consciousness Studies, 26(9–10), 141–167.

Geschwind, N. (1970). The Organization of Language and the Brain: Language disorders

after brain damage help in elucidating the neural basis of verbal behavior. Science, 170(3961), 940-944.

Gilbert, M., & Orlans, V. (2011). A Review of the Literature on Integration. Integrative therapy; 100 key points and techniques, 1968, 19-39.

Gildea, I. J. (2018). Ricoeur's theory of metaphor as trauma praxis. Journal of Literature and Trauma Studies, 7(2), 21–42. https://doi.org/10.1353/jlt.2018.0005

Giotakos, O. (2020). Neurobiology of emotional trauma. Psychiatriki, 31(2), 162–172. https://doi.org/10.22365/jpsych.2020.312.162

Glück, T. M., Knefel, M., & Lueger-Schuster, B. (2017). A network analysis of anger, shame, proposed ICD-11 post-traumatic stress disorder, and different types of childhood trauma in foster care settings in a sample of adult survivors. European Journal of Psychotraumatology, 8(sup3), 1372543.

Goffman, E. (1959). The presentation of self in everyday life. Penguin.

Goldsmith, R. E., & Freyd, J. J. (2005). Awareness for emotional abuse. Journal of Emotional Abuse, 5(1), 95-123.

Goldsmith, R. E., Barlow, M. R., & Freyd, J. J. (2004). Knowing and not knowing about trauma: Implications for therapy. Psychotherapy: Theory, research, practice, training, 41(4), 448.

Goyal, M., Singh, S., Sibinga, E. M. S., Gould, N. F., Rowland-Seymour, A., Sharma, R., ... & Haythornthwaite, J. A. (2014). Meditation programs for psychological stress and well-being: A systematic review and meta-analysis. JAMA Internal Medicine, 174(3), 357–368. https://doi.org/10.1001/jamainternmed.2013.13018

Gray, R. T. (2010). Writing at the Roche limit: Order and entropy in W. G. Sebald's Die Ringe des Saturn. The German Quarterly, 83(1), 38–57.

Greene, B. (2024). The elegant universe: Superstrings, hidden dimensions, and the quest for the ultimate theory. WW Norton & Company.

Griffin, H. (2024). Survivors at the centre? Learnings from survivor epistemology operating in a public inquiry into child sexual abuse [Doctoral dissertation, University of Essex]. ProQuest Dissertations & Theses

Griffiths, T. L., Chater, N., Kemp, C., Perfors, A., & Tenenbaum, J. B. (2010). Probabilistic models of cognition: Exploring representations and inductive biases. Trends in Cognitive Sciences, 14(8), 357–364. https://doi.org/10.1016/j.tics.2010.05.004

Guba, E. G., & Lincoln, Y. S. (1994). Competing paradigms in qualitative research. Handbook of qualitative research, 2(163-194), 105.

Guyon, R., Fernet, M., & Godbout, N. (2020). ‘‘A journey back to my wholeness’’: A qualitative metasynthesis on the relational and sexual recovery process of child sexual abuse survivors. International Journal of Child and Adolescent Resilience, 7(1), 72-86.

Hakamata, Y., Mizukami, S., Izawa, S., Moriguchi, Y., Hori, H., Matsumoto, N., ... & Tagaya, H. (2021). Childhood trauma affects autobiographical memory deficits through basal cortisol and prefrontal-extrastriate functional connectivity. Psychoneuroendocrinology, 127, 105172.

Hameroff, S. R. (2013). Quantum mathematical cognition requires quantum brain biology: The “Orch OR” theory. Behavioral and Brain Sciences. https://doi.org/10.1017/S0140525X13001825

Hameroff, S., & Penrose, R. (2014). Consciousness in the universe: A review of the ‘Orch OR’theory. Physics of life reviews, 11(1), 39-78.

Haris, E. M., Bryant, R. A., Williamson, T. H., & Korgaonkar, M. S. (2023). Functional connectivity of amygdala subnuclei in PTSD: A narrative review. Molecular Psychiatry. https://doi.org/10.1038/s41380-023-02291-w

Harris, J., Loth, E., & Sethna, V. (2024). Tracing the paths: a systematic review of mediators of complex trauma and complex post-traumatic stress disorder. Frontiers in psychiatry, 15, 1331256.

Harvey, M. R. (2000). In the aftermath of sexual abuse: Making and remaking meaning in narratives of trauma and recovery. Narrative Inquiry.

Hatfield, G. (1989). Epistemology and Cognition.

Heisenberg, W. (1927). Heisenberg uncertainty principle. Zeitschrift für Physik, 43, 172.

Held, P., Schumm, J. A., Klassen, B. J., & Zalta, A. K. (2023). Posttraumatic stress symptom networks and treatment outcomes: A Bayesian network perspective. Journal of Anxiety Disorders, 93, 102693. https://doi.org/10.1016/j.janxdis.2022.102693

Helfrich, R. F., & Knight, R. T. (2016).Adams, B., & Petruccione, F. (2020). Quantum effects in the brain: A review. AVS Quantum Science, 2(2).

Herman, J. L. (1992). Trauma and recovery: The aftermath of violence—from domestic abuse to political terror. Basic Books.

Hillary, F. G., & Grafman, J. H. (2017). Injured brains and adaptive networks: the benefits and costs of hyperconnectivity. Trends in cognitive sciences, 21(5), 385-401.

Hillary, F. G., Rajtmajer, S. M., Roman, C. A., Medaglia, J. D., Slocomb-Dluzen, J. E., Calhoun, V. D., ... & Wylie, G. R. (2014). The rich get richer: brain injury elicits hyperconnectivity in core subnetworks. PloS one, 9(8), e104021.

Hirschberger, G. (2018). Collective trauma and the social construction of meaning. Frontiers in Psychology, 9, 1441. https://doi.org/10.3389/fpsyg.2018.01441

Hitchcock, C., Nixon, R. D., & Weber, N. (2014). A review of overgeneral memory in child psychopathology. British Journal of Clinical Psychology, 53(2), 170-193.

Hodgdon, H. B., Suvak, M. K., Zinoviev, D. Y., Liebman, R. E., Briggs, E. C., &

Spinazzola, J. (2019). Network analysis of exposure to trauma and childhood adversities in a clinical sample of youth. Psychological Assessment, 31(11), 1294–1306.

Hogenson, G. B. (2004). What are symbols symbols of? Situated action, mythological bootstrapping, and the emergence of the Self. Journal of Analytical Psychology, 49(1), 67–81.

Hohwy, J. (2013). The predictive mind: Oxford University Press.

Horstkotte, S. (2005). The Double Dynamics of Focalization in WG Sebald's The Rings of Saturn. na.

Hunter, S. V. (2010). Evolving narratives about childhood sexual abuse: Challenging the dominance of the victim and survivor paradigm. Australian and New Zealand Journal of Family Therapy, 31(2), 176–190.

Hunter, S. V. (2011). Disclosure of child sexual abuse as a life-long process: Implications for health professionals. Australian and New Zealand Journal of Family Therapy, 32(2), 159-172.

Husserl, E. (2012). *On the phenomenology of the consciousness of internal time (1893–1917)* (Vol. 4). Springer Science & Business Media.

Huon, P., & Stutz, N. (2020). Les marqueurs linguistiques du temps et de la subjectivité

dans le récit de psychotraumatisme. L'Évolution Psychiatrique, 85(4), 479-508.

Hyland, P., Karatzias, T., Ford, J. D., Fox, R., & Spinazzola, J. (2022). The latent structure of child and adolescent psychopathology and its association with different forms of trauma and suicidality and self-harm: Latent structure of psychopathology. *Research on child and adolescent psychopathology*, *50*(11), 1501-1513.

Hyvärinen, M., Hydén, L. C., Saarenheimo, M., & Tamboukou, M. (2010). Beyond narrative coherence: An introduction. Beyond narrative coherence, 1-15.

Ifergan, M., Keydar, R., Abend, O., & Pinchevski, A. (2024). Identifying narrative patterns and outliers in holocaust testimonies using topic modeling. arXiv preprint arXiv:2405.02650.

IICSA. (2022). Truth Project research report: Thematic analysis of 6,000+ CSA survivor testimonies. Independent Inquiry into Child Sexual Abuse.

Ingold, T. (2021). Being alive: Essays on movement, knowledge and description. Routledge.

International Society for the Study of Trauma and Dissociation. (2011). Guidelines for treating dissociative identity disorder in adults, third revision: Summary version. Journal of Trauma & Dissociation, 12(2), 188-212.

Isn't Stories, S. A. K., Abelson, R. P., & Schank, R. C. (1995). NON-STORY

KNOWLEDGE. Knowledge and Memory: The Real Story, 8, 227.

Isvoranu, A.-M., Epskamp, S., & Cheung, M. W.-L. (2021). Network models of posttraumatic stress disorder: A meta-analysis. Journal of Abnormal Psychology, 130(8), 841–856.

Jabri, V. (2023). Ontology, relationality and an alternative reading of ‘difference’.Baytaş, B., & Derin, O. E. (2024). Category-theoretic formulation of relational materialism. arXiv preprint arXiv:2409.02487.

Jacobs-Kayam, A., & Lev-Wiesel, R. (2019). In Limbo: Time perspective and memory deficit among female survivors of sexual abuse. Frontiers in psychology, 10, 912.

Jacobs, A. M. (2015). Neurocognitive poetics: Methods and models for investigating the neuronal and cognitive-affective bases of literature reception. Frontiers in Human Neuroscience, 9, 186. https://doi.org/10.3389/fnhum.2015.00186

James, L. M., Engdahl, B., Leuthold, A., Lewis, S. M., Van Kampen, E., & Georgopoulos, A. P. (2013). Neural network modulation by trauma as a marker of resilience. JAMA Psychiatry, 70(8), 841–849. https://doi.org/10.1001/jamapsychiatry.2013.878

James, W. (1950). *The Principles of Psychology (In 2 Vols.)*. Dover Publications.

Janet, P. (1925). Psychological healing: A historical and clinical study (Vol. 2). G. Allen & Unwin.

Janoff-Bulman, R. (1992). Shattered assumptions: Towards a new psychology of trauma.

New York: Free Press.

Janssens, H. (2022). The configuration of an interconnected humanity in W. G. Sebald's The Rings of Saturn. Presented at the 53rd Annual Convention of the NeMLA.

Jay, A., Evans, M., Frank, I., & Sharpling, D. (2022). The report of the independent inquiry into child sexual abuse. The independent inquiry into child sexual abuse.

Jimoh, O., & Omiyefa, S. (2025). Neuroscientific mechanisms of trauma-induced brain alterations and their long-term impacts on psychiatric disorders. International Journal of Science and Research Archive, 14(3), Article 0621. https://doi.org/10.30574/ijsra.2025.14.3.0621

Jirek, S. L. (2016). Narrative reconstruction and post-traumatic growth among trauma survivors: The importance of narrative in social work research and practice. Qualitative Social Work, 16(2), 166–183. https://doi.org/10.1177/1473325016656046

Johansson, J. A., & Holmes, D. (2024). "Recovery" in mental health services, now and then: A poststructuralist examination of the despotic State machine's effects. Nursing Inquiry, 31(1), e12558.

Johnson, B. (1985). The critical difference: Essays in the contemporary rhetoric of reading. JHU Press.

Jones, D. (2015). Embodied cognition and information.

Jordan, J., & Mitchell, S. A. (2000). Relationality: From Attachment to Intersubjectivity. Analytic Press.

Joseph, S. (2018). Executive derailment, coaching and posttraumatic growth: reflections on practice guided by theory. Coaching: An International Journal of Theory, Research and Practice, 11(2), 155-164

Jung, C. G. (1969). The archetypes and the collective unconscious. Princeton University Press.

Juster, R. P., McEwen, B. S., & Lupien, S. J. (2010). Allostatic load biomarkers of chronic stress and impact on health and cognition. Neuroscience & Biobehavioral Reviews, 35(1), 2–16. https://doi.org/10.1016/j.neubiorev.2009.10.002

Kaminer, D. (2006). Healing processes in trauma narratives: A review. South African Journal of Psychology, 36(3), 481–499. https://doi.org/10.1177/008124630603600305

Kaplan, D. M. (1972). Jung and alchemical symbolism. Journal of Religion and Health, 11(4), 315–327.

Kaplan, E. K. (1972). Gaston Bachelard's philosophy of imagination: An introduction. Philosophy and Phenomenological Research, 33(1), 1-24.

Karakaş, S., Erzengin, Ö. U., & Başar, E. (2000). A new strategy involving multiple cognitive paradigms demonstrates that ERP components are determined by the superposition of oscillatory responses. Clinical Neurophysiology, 111(10), 1719–

1732. https://doi.org/10.1016/S1388-2457(00)00376-1

Karbowski, J. (2024). Information thermodynamics: From physics to neuroscience. Entropy, 26(9), 779.

Karimi-Aghdam, S. (2017). Zone of proximal development (ZPD) as an emergent system: A dynamic systems theory perspective. Integrative Psychological and Behavioral Science, 51(1), 76-93.

Karsna, K. (2022). Child sexual abuse in 2020/21: Trends in official data. Centre of Expertise in Child.

Karsna, K., & Kelly, L. (2021). The scale and nature of child sexual abuse: Review of evidence. Centre of expertise on child sexual abuse. Essex Barnardo House.

Kashyap, R. (2009). Narrative and truth: a feminist critique of the South African Truth and Reconciliation Commission. Contemporary Justice Review, 12(4), 449-467.

Kaspi, G., & Ratsaby, J. (2012, November). Parallel processing algorithm for Bayesian network inference. In 2012 IEEE 27th Convention of Electrical and Electronics Engineers in Israel (pp. 1-5). IEEE.

Katzarski, I. (2022). Quantum mechanics, being and cognition. Balkan Journal of Philosophy, 14(2), 111–124.

Kau, F., Lusher, J., & Pipkin, A. (2024). Meaning making in the aftermath of trauma: A

narrative review. World Journal of Advanced Research and Reviews, 21(1), 1202-1208.

Keenan, E. K. (2010). Seeing the forest and the trees: Using dynamic systems theory to understand “stress and coping” and “trauma and resilience”. Journal of Human Behavior in the Social Environment, 20(8), 1038-1060.

Kerr, D. J., Crowe, T. P., & Oades, L. G. (2013). The reconstruction of narrative identity during mental health recovery: A complex adaptive systems perspective. Psychiatric Rehabilitation Journal, 36(2), 108.

Kerr, R. (2018). A pluralistic approach to the treatment of complex post-traumatic stress disorder [Master's case study]. Abertay University, Dundee, UK.

Kerr, R. (2024). The Atholl Approach: A pluralistic approach to service delivery design for trauma survivors. Perth, UK: Trauma Healing Together.

Khader, J. (2012). Un/Speakability and radical otherness: The ethics of trauma in Bram Stoker’s Dracula. College Literature, 39(3), 73–97.

Khrennikov, A. (2015). Quantum-like modeling of cognition, decision-making, and personality. Journal of Mathematical Psychology, 64–65, 76–77. https://doi.org/10.1016/j.jmp.2014.09.007

Khrennikov, A. (2021). Consciousness and unconsciousness viewed through the prism of quantum theory. Entropy, 23(10), 1318.

Khrennikov, A. (2021). Quantum epistemology and the unconscious. Frontiers in Psychology, 12, 669094. https://doi.org/10.3389/fpsyg.2021.669094

Khrennikov, A. (2021). Quantum-like model for unconscious-conscious interaction and emotional coloring of perceptions and other conscious experiences. arXiv preprint arXiv:2106.05191.

Khrennikov, A. (2021). Unconscious-conscious interaction in a quantum-like brain. Biosystems, 199, 104305. https://doi.org/10.1016/j.biosystems.2020.104305

Kirmayer, L. J., & Gómez-Carrillo, A. (2019). Embodiment and the aftermath of trauma: A phenomenological and ethnographic approach. Transcultural Psychiatry, 56(2), 198–221.

Kirmayer, L. J., Lemelson, R., & Barad, M. (2007). Introduction: Inscribing trauma in culture, brain, and body. Understanding trauma: Integrating biological, clinical, and cultural perspectives, 1-20.

Kisiel, C., Fehrenbach, T., Liang, L.-J., Stolbach, B., McClelland, G. M., Griffin, G., Maj, N., Briggs, E. C., Vivrette, R.

L., Layne, C. M., & Spinazzola, J. (2014). Examining child sexual abuse in relation to complex patterns of trauma exposure: Findings from the National Child Traumatic Stress Network. Psychological Trauma: Theory, Research, Practice, and Policy, 6(S1), S29–S39. https://doi.org/10.1037/a0037812

Kleim, B., Horn, A. B., Kraehenmann, R., Mehl, M. R., & Ehlers, A. (2018). Early linguistic markers of trauma-specific processing predict post-trauma adjustment. Frontiers in psychiatry, 9, 645.

Knill, D. C., & Pouget, A. (2004). The Bayesian brain: the role of uncertainty in neural coding and computation. TRENDS in Neurosciences, 27(12), 712-719.

Knill, D. C., & Pouget, A. (2004). The Bayesian brain: The role of uncertainty in neural coding and computation. Trends in Neurosciences, 27(12), 712–719.

Knowles, C. (2023). Articulating understanding: a phenomenological approach to testimony on gendered violence. In Testimonial Injustice and Trust (pp. 173-197). Routledge.

Koch, C. (2017). *Consciousness: Confessions of a romantic reductionist*. MIT press.

Köhler, W. (1970). Gestalt psychology: An introduction to new concepts in modern psychology. WW Norton & Company.

Kolassa, I. T., & Elbert, T. (2007). Structural and functional neuroplasticity in relation to traumatic stress. Current Directions in Psychological Science, 16(6), 321–325. https://doi.org/10.1111/j.1467-8721.2007.00529.x

Komareji, M., & Bouffanais, R. (2013). Resilience and controllability of dynamic collective behaviors. PLoS one, 8(12), e82578.

Korf, J. (2015). Quantum and multidimensional explanations in a neurobiological context of mind. The Neuroscientist, 21(1), 94–107. https://doi.org/10.1177/1073858414535986

Koschorreck, M. (2016). Analyzing the Network of Traumas in Colum McCann's Let the Great World Spin. Current Objectives of Postgraduate American Studies, 17(1).

Kragel, P. A., Knodt, A. R., Hariri, A. R., & LaBar, K. S. (2016). Decoding spontaneous emotional states in the human brain. PLoS biology, 14(9), e2000106.

Kragel, P. A., Knodt, A. R., Hariri, A. R., & LaBar, K. S. (2016). Decoding spontaneous emotional states in the human brain. PLOS Biology, 14(9), e2000106.

Kragel, P. A., Koban, L., Barrett, L. F., & Wager, T. D. (2016). Representation, pattern information, and brain signatures: From neurons to neuroimaging. Neuron, 93(5), 1040–1055.

Krayer, A., Seddon, D., Robinson, C., & Gwilym, H. (2015). The influence of child sexual abuse on the self from adult narrative perspectives. Journal of Child Sexual Abuse.

Kredlow, M. A., & Otto, M. W. (2015). Interference with the reconsolidation of trauma-related memories in adults. Depression and Anxiety, 32(1), 32–37. https://doi.org/10.1002/da.22343

Kristeva, J. (2024). Powers of horror: An essay on abjection. Columbia University Press.

Kristeva, J. (2024). Revolution in poetic language. Columbia University Press.

Krohn, S., von Schwanenflug, N., Waschke, L., Romanello, A., Gell, M., Garrett, D. D., & Finke, C. (2023). A spatiotemporal complexity architecture of human brain activity. Science Advances, 9(5), eade4737.

Krupnik, V. (2020). Trauma or drama: A predictive processing perspective on the continuum of stress. Frontiers in Psychology, 11, 1248.

Kube, T., Berg, M., Kleim, B., & Herzog, P. (2020). Rethinking post-traumatic stress disorder–A predictive processing perspective. Neuroscience & Biobehavioral Reviews, 113, 448-460.

Kube, T., Berg, M., Kleim, B., & Herzog, P. (2020). Rethinking post-traumatic stress disorder–A predictive processing perspective. Neuroscience & Biobehavioral Reviews, 113, 448-460.

Kuhfuß, M., Maldei, T., Hetmanek, A., & Schäfer, S. K. (2021). Somatic experiencing–effectiveness and key factors of a body-oriented trauma therapy: A scoping literature review. European Journal of Psychotraumatology, 12(1), 1945745. https://doi.org/10.1080/20008198.2021.1945745

Kupfer, C., McLeod, J., & Cooper, M. (2023). Pluralistic therapy. In The Sage handbook of counselling and psychotherapy (pp. 462-468). SAGE.

Kyriazos, T. A., & Poga, M. (2024). Toward a quantum model of the psyche: Psychological applications of quantum theory. Journal of Theoretical Psychology, 44(1), 10–27.

Kyriazos, T., & Poga, M. (2024). Quantum concepts in Psychology: Exploring the interplay of physics and the human psyche. Biosystems, 235, 105070.

Lacan, J. (2006). Écrits: The first complete edition in English (B. Fink, Trans.). W.W. Norton & Co.

Lacan, J. (2006). The mirror stage as formative of the function of the I. In É. Roudinesco (Ed.), Écrits: The first complete edition in English (B. Fink, Trans., pp. 75–81). W. W. Norton.

Lakoff, G., & Johnson, M. (2003). Metaphors We Live By New edition. Chicago, IL: University of ChicagoPress.Liebig, N. N. (2016). Writing/trauma (Doctoral dissertation, University of South Florida).

Lanius, R. A. (2015). Trauma-related dissociation and altered states of consciousness: A call for clinical, treatment, and neuroscience research. European Journal of Psychotraumatology, 6, 27905

Lanius, R. A., Terpou, B. A., & McKinnon, M. C. (2020). The sense of self in the

aftermath of trauma: Lessons from the default mode network in posttraumatic stress disorder. European Journal of Psychotraumatology, 11(1), 1807703. https://doi.org/10.1080/20008198.2020.1807703

Lăpugean, M. (2015). Speaking about the Unspeakable: Trauma and Representation. BAS British and American Studies, (21), 85-91.

Laquidara, G. (n.d.). A conceptualisation of historiographysics: Quantum physics of history. ResearchGate.

Latour, B. (2005). Reassembling the social: An introduction to Actor–Network-Theory. Oxford University Press.

Latour, B. (2013). An inquiry into modes of existence. Harvard University Press.

Laub (Eds.), Testimony: Crises of witnessing in literature, psychoanalysis, and history (pp. 57–74). Routledge.

Laub, D. (2013). Bearing witness or the vicissitudes of listening. In Testimony (pp. 57-74). Routledge.

Laub, D., & Auerhahn, N. C. (1993). Knowing and not knowing massive psychic trauma: Forms of traumatic memory. International Journal of Psychoanalysis, 74, 287–302.

Le Guin, U. K. (2018). Dreams must explain themselves: The selected nonfiction of Ursula K. Le Guin (S. Vint, Ed., p. xx). Gollancz.

Le Guin, U. K. (2018). No time to spare: Thinking about what matters. Mariner Books.

Le Guin, U. K. (2018). The language of the night: Essays on fantasy and science fiction. Putnam.

Lebedeva, A. (2024). Testimony in Truth Commissions.

Lebois, L. A. M., Kumar, P., Palermo, C. A., Lambros, A. M., O'Connor, L., Wolff, J. D., Baker, J. T., Gruber, S. A.,

Lewis-Schroeder, N., Ressler, K. J., Robinson, M. A., Winternitz, S., Nickerson, L. D., & Kaufman, M. L. (2022). Deconstructing dissociation: A triple network model of trauma-related dissociation and its subtypes. Neuropsychopharmacology, 47(13), 2261–2270.

Lebois, L. A. M., Li, M., Baker, J. T., Wolff, J. D., Wang, D., Lambros, A. M., Grinspoon, E., Winternitz, S., Ren, J., Gönenç, A., Gruber, S. A., Ressler, K. J., Liu, H., & Kaufman, M. L. (2020).

Large-scale functional brain network architecture changes associated with trauma-related dissociation. American Journal of Psychiatry, 177(12), 1123–
1133. https://doi.org/10.1176/appi.ajp.2020.20010050

Lebois, L. A. M., Seligowski, A. V., Wolff, J. D., Hill, S. B., & Ressler, K. J. (2020). Neural network dysregulation in PTSD: Evidence from functional connectivity and graph theory. Biological Psychiatry: Cognitive Neuroscience and Neuroimaging, 5(4), 419–427.

Lebois, L. A. M., Wolff, J. D., & Ressler, K. J. (2020). Individual differences in

posttraumatic stress: A neurobiological framework for context-specific learning. Neurobiology of Stress, 13, 100260. https://doi.org/10.1016/j.ynstr.2020.100260

Lebois, L. A. M., Wolff, J. D., Lebois, E. P., et al. (2020). Dissociation and alterations in brain network connectivity in PTSD: A neurobiological model of symptom expression. JAMA Psychiatry, 77(3), 232–241. https://doi.org/10.1001/jamapsychiatry.2019.2280

Lebois, L. A. M., Wolff, J. D., Ressler, K. J., & Pine, D. S. (2020). The role of large-scale brain networks in PTSD. Neuropsychopharmacology, 45(3), 449–457. https://doi.org/10.1038/s41386-019-0565-7

Lecca, P., & Re, A. (2019). Theoretical physics for biological systems. CRC Press.

Lecercle, J.-J. (1990). The violence of language. Routledge.

Lehrer, P. M., & Gevirtz, R. (2014). Heart rate variability biofeedback: How and why does it work? Frontiers in Psychology, 5, 756. https://doi.org/10.3389/fpsyg.2014.00756

Lenneberg, E. H. (1973). The neurology of language. Daedalus, 115-133.

Lev-Wiesel, R., Goldner, L., Malishkevich Haas, R., Hait, A., Frid Gangersky, N., Lahav, L., ... & Binson, B. (2024). Adult survivors of child sexual abuse draw and describe their experiences of dissociation. Violence against women, 30(10), 2655-2673.

Lewandowsky, S., & Oberauer, K. (2018). Computational modeling in cognition and cognitive neuroscience. Stevens' handbook of experimental psychology and cognitive neuroscience, 5, 1-35.

Lewin, K. (1943). Defining the'field at a given time.'. Psychological review, 50(3), 292.

Lewin, K. (2013). Principles of topological psychology. Read Books Ltd.

Li, Q., Wang, B., & Song, D. (2022). Quantum affective processes for multidimensional decision-making. Scientific Reports, 12, 22855. https://doi.org/10.1038/s41598-022-22855-0

Li, X., Jia, X., Liu, Y., Bai, G., Pan, Y., Ji, Q., ... & Bai, L. (2023). Brain dynamics in triple-network interactions and its relation to multiple cognitive impairments in mild traumatic brain injury. Cerebral Cortex, 33(11), 6620-6632.

Liebig, J. (2019). Writing/trauma: Language, rupture, and embodiment in post-traumatic expression (Doctoral dissertation, University of South Florida). University of South Florida Scholar Commons. https://digitalcommons.usf.edu/etd/7814

Liebig, N. N. (2016). Writing/trauma (Doctoral dissertation, University of South Florida).

Lin, H. (2024). To be a frequentist or Bayesian? Five positions in a spectrum. Harvard Data Science Review, 6(3).

Lincoln, Y. S., & Guba, E. G. (1985). Naturalistic inquiry. SAGE.

Linson, A., & Friston, K. (2019). Reframing PTSD for computational psychiatry with the active inference framework. Cognitive neuropsychiatry, 24(5), 347-368.

Linson, A., Parr, T., & Friston, K. J. (2020). Active inference, stressors, and psychological trauma: A neuroethological model of (mal) adaptive explore-exploit dynamics in ecological context. Behavioural brain research, 380, 112421.

Liu, S., Erkkinen, M. G., Healey, M. L., Xu, Y., Swett, K. E., Chow, H. M., & Braun, A. R. (2015). Brain activity and connectivity during poetry composition: Toward a multidimensional model of the creative process. Human Brain Mapping, 36(9), 3351–3372. https://doi.org/10.1002/hbm.22849

Liu, Y., Li, L., Li, B., Feng, N., Li, L., Zhang, X., ... & Yin, H. (2017). Decreased triple network connectivity in patients with recent onset post-traumatic stress disorder after a single prolonged trauma exposure. Scientific reports, 7(1), 12625.

Lopez, J. (2020). Healing is rhizomatic: A conceptual framework and tool. Genealogy, 4(4), 115.

Luckhurst, R. (2008). The trauma question. Routledge.

Luterek, J. A., Orsillo, S. M., & Marx, B. P. (2005). An experimental examination of emotional experience, expression, and disclosure in women reporting a history of childhood sexual abuse. Journal of Traumatic Stress: Official Publication of The

International Society for Traumatic Stress Studies, 18(3), 237-244.

Mahon, D. (2024). An umbrella review of systematic reviews on trauma informed approaches. Community Mental Health Journal, 60(8), 1627-1651.

Main, M., & Solomon, J. (1990). Procedures for identifying infants as disorganized/disoriented during the Ainsworth Strange Situation. In M. T. Greenberg, D. Cicchetti, & E. M. Cummings (Eds.), Attachment in the preschool years (pp. 121–160). University of Chicago Press.

Maiorana, A., Zamudio-Haas, S., Santiago-Rodríguez, E. I., Sauceda, J. A., Rodríguez-Díaz, C. E., Brooks, R. A., & Myers, J. J. (2023). HIV disclosure practices to family among Mexican and Puerto Rican sexual minority men with HIV in the continental USA: Intersections of sexual orientation and HIV stigma. Journal of homosexuality, 70(9), 1911-1935.

Maisel, M. (2011). Have Truth and Reconciliation Commissions Helped Remediate Human Rights Violations against Women-A Feminist Analysis of the Past and Formula for the Future. Cardozo J. Int'l & Comp. L., 20, 143.

Majhi, S., Bera, B. K., Ghosh, D., & Perc, M. (2019). Chimera states in neuronal networks: A review. Physics of life reviews, 28, 100-121.

Mambrol, N. (2018). Trauma studies. Literary Theory and Criticism, 19. Retrieved from literariness.org

Manahan-Vaughan, E., & Papworth, J. (2024). The role of metaphor in coaching when re-authoring narratives in post-traumatic growth: A thematic analysis. International Journal of Evidence Based Coaching and Mentoring, 22(2), 130–148.

Markov, A. (1971). Extension of the limit theorems of probability theory to a sum of variables connected in a chain. Dynam Probabilist Syst, 1, 552.

Marmar, C. R., Weiss, D. S., & Metzler, T. J. (1994). Peritraumatic dissociation and posttraumatic stress disorder. In L. J. Kirmayer & Y. M. St-Hilaire (Eds.), Trauma and Memory (pp. 229–253). Guilford Press.

Massad, P. M., & Hulsey, T. L. (2006). Causal attributions in posttraumatic stress disorder: Implications for clinical research and practice. Psychotherapy: Theory, Research, Practice, Training, 43(2), 201.

McAdams, D. P. (2011). Narrative identity. In Handbook of identity theory and research (pp. 99-115). New York, NY: Springer New York.

McBride, O., Hyland, P., Murphy, J., & Elklit, A. (2019). Network analysis of posttraumatic stress experiences of adults seeking psychological treatment for childhood sexual abuse. Journal of Traumatic Stress, 32(6), 877–887. https://doi.org/10.1002/jts.22381

McClelland, J. L. (1988). Connectionist models and psychological evidence. Journal of memory and language, 27(2), 107-123.

McEwen, B. S. (1998). Protective and damaging effects of stress mediators. New England

Journal of Medicine, 338(3), 171–179. https://doi.org/10.1056/NEJM199801153380307

McEwen, B. S., & Stellar, E. (1993). Stress and the individual: Mechanisms leading to disease. Archives of Internal Medicine, 153(18), 2093–2101. https://doi.org/10.1001/archinte.1993.00410180039004

McFarlane, A. C., Yehuda, R., & Clark, C. R. (2002). Biologic models of traumatic memories and post-traumatic stress disorder: The role of neural networks. Psychiatric Clinics of North America, 25(2), 253–270.

McNally, R. J., Heeren, A., & Robinaugh, D. J. (2017). A Bayesian network analysis of posttraumatic stress disorder symptoms in adults reporting childhood sexual abuse. Europ

McNally, R. J., Heeren, A., & Robinaugh, D. J. (2017). A Bayesian network analysis of posttraumatic stress disorder symptoms in adults reporting childhood sexual abuse. European journal of psychotraumatology, 8(sup3), 1341276.

McPhillips, K., Salter, M., Roberts-Pedersen, E., & Kezelman, C. (2020). Understanding trauma as a system of psycho-social harm: Contributions from the Australian Royal Commission into Child Sex Abuse. Child Abuse & Neglect, 99, 104232.

McTavish, J. R., Sverdlichenko, I., MacMillan, H. L., & Wekerle, C. (2019). Child sexual abuse, disclosure and PTSD: A systematic and critical review. Child abuse & neglect, 92, 196-208.

Melkikh, A. V. (2021). The brain and the new foundations of mathematics. Symmetry, 13(11), 2097. https://doi.org/10.3390/sym13112097

Menon, B. (2019). Towards a new model of understanding–The triple network, psychopathology and the structure of the mind. Medical hypotheses, 133, 109385.

Menon, V. (2011). Large-scale brain networks and psychopathology: a unifying triple network model. Trends in cognitive sciences, 15(10), 483-506.

Meretoja, H. (2014). Narrative and human existence: Ontology, epistemology, and ethics. New Literary History, 45(1), 89–109.

Miller, B. (2012). 06.213: Attacks with Knives and Sharp Instruments: Quantitative Coding and the Witness to Atrocity. Leonardo, 45(1), 86-87.

Miller, S. C. (2022). Toward a relational theory of harm: on the ethical implications of childhood psychological abuse. Journal of Global Ethics, 18(1), 15-31.

Mindell, A. (2012). Quantum mind: The edge between physics and psychology. Lao Tse Press.

Mistry, P. K., Trueblood, J. S., Vandekerckhove, J., & Pothos, E. M. (2015). A latent-

mixture quantum probability model of causal reasoning within a Bayesian inference framework. In Proceedings of the Annual Meeting of the Cognitive Science Society (Vol. 37).

Mitchell, S. A. (1988). Relational concepts in psychoanalysis. Harvard University Press.

Modell, A. H. (1993). The private self. Harvard University Press.

Modell, A. H. (1997). The synergy of memory affects and metaphor. Journal of Analytical Psychology, 42(1), 105–114. https://doi.org/10.1111/j.1465-5922.1997.00105.x

Modell, A. H. (2003). Imagination and the meaningful brain. mit Press.

Modell, A. H. (2005). Emotional memory, metaphor, and meaning. Psychoanalytic Inquiry, 25(4), 555–571. https://doi.org/10.2513/s07351690pi2504_9

Modell, A. H. (2009). Metaphor—The bridge between feelings and knowledge. Psychoanalytic Inquiry, 29(1), 6-11.

Modelli, M. E., Galvão, M. F., & Pratesi, R. (2012). Child sexual abuse. Forensic science international, 217(1-3), 1-4.

Montagnese, M., et al. (2020). Models of dynamic belief updating in psychosis: A review across computational approaches. Frontiers in Psychiatry, 11, 561577. https://doi.org/10.3389/fpsyt.2020.561577

Moore, D., Woodhouse, A., & Chambers, S. (2020). Psychiatric diagnosis and the negotiation of identity in young people. Social Science & Medicine, 257, 112866. https://doi.org/10.1016/j.socscimed.2020.112866

Moore, R., McAuley, T., & Soini, H. (2020). Psychiatric diagnosis and the identity politics of the self. Theory & Psychology, 30(4), 523–545. https://doi.org/10.1177/0959354320930564

Morris, R. G. M. (1989). Parallel distributed processing. Implications for.

Moulard-Leonard, V. (2012). Moving beyond us and them? Marginality, rhizomes, and immanent forgiveness. Hypatia, 27(4), 828-846.

Mueller-Pfeiffer, C., Martin-Soelch, C., Blair, J. R., Carnier, A., Kaiser, N., Rufer, M., ... & Hasler, G. (2010). Impact of emotion on cognition in trauma survivors: what is the role of posttraumatic stress disorder?. Journal of affective disorders, 126(1-2), 287-292.

Muldoon, S. F., & Bassett, D. S. (2016). Network and multilayer network approaches to understanding human brain dynamics. Philosophy of Science, 83(5), 710–720. https://doi.org/10.1086/687857

Munro, R. (1997). Connection/disconnection: Theory and practice in organization control. British Journal of Management, 8, 43-63.

Murphy, E., Hoshi, K., & Benítez-Burraco, A. (2022). Subcortical syntax: Reconsidering the neural dynamics of language. Journal of Neurolinguistics, 62, 101062.

Murray, L. K., Nguyen, A., & Cohen, J. A. (2014). Child sexual abuse. Child and adolescent psychiatric clinics of North America, 23(2), 321.

Murris, K., & Fullagar, S. (2021). Entanglement. In A glossary for doing postqualitative, new materialist and critical posthumanist research across disciplines (pp. 62-63). Routledge.

Mutch, P. (2005). The implicate order and the spiritual dimension of social research. ReVision, 27(3), 21–26.

Nacey, S. (2020). Figurative production in a computer-mediated discussion forum: Metaphors about relationship abuse. In Producing figurative expression: Theoretical, experimental and practical perspectives (pp. 363-388). John Benjamins Publishing Company.

Nagtegaal, M. H., & Boonmann, C. (2022). Child sexual abuse and problems reported by survivors of CSA: A meta-review. Journal of Child Sexual Abuse, 31(2), 147–176.

Nayar, U. S. (2015). The right to childhood: reflections on the 2014 Nobel Peace

Prize. Child abuse and neglect, 44, 5-7.

Neimeyer, R. A. (2006). Complicated Grief and the Reconstruction of Meaning: Conceptual and Empirical Contributions to a Cognitive-Constructivist Model. Clinical Psychology: Science and Practice, 13(2), 141.

Neimeyer, R. A. (2014). The changing face of grief: Contemporary directions in theory, research, and practice. Progress in Palliative Care, 22(3), 125-130.

Neimeyer, R. A., Herrero, O., & Botella, L. (2006). Chaos to coherence: Psychotherapeutic integration of traumatic loss. Journal of constructivist psychology, 19(2), 127-145.

Nicholson, A. A., Friston, K. J., Zeidman, P., Harricharan, S., McKinnon, M. C., Densmore, M., ... & Lanius, R. A. (2017). Dynamic causal modeling in PTSD and its dissociative subtype: Bottom–up versus top–down processing within fear and emotion regulation circuitry. Human brain mapping, 38(11), 5551-5561.

Nietlisbach, G., & Maercker, A. (2009). Social cognition and interpersonal impairments in trauma survivors with PTSD. Journal of Aggression, Maltreatment & Trauma, 18(4), 382–402.

Noguchi, W., Iizuka, H., Yamamoto, M., & Taguchi, S. (2022). Superposition mechanism as a neural basis for understanding others. Scientific Reports, 12,

2859. https://doi.org/10.1038/s41598-022-06739-6

Noll, J. G. (2021). Child sexual abuse as a unique risk factor for the development of psychopathology: The compounded convergence of mechanisms. Annual review of clinical psychology, 17(1), 439-464.

Noori, H. R., & Spanagel, R. (2013). Quantum modeling of common sense. Behavioral & Brain Sciences, 36(3).

O'Connor, C., Kadianaki, I., Maunder, K., & McNicholas, F. (2018). How does psychiatric diagnosis affect young people's self-concept and social identity? A systematic review and synthesis of the qualitative literature. Social Science & Medicine, 212, 94-119.

O'Reilly, J. X., Jbabdi, S., & Behrens, T. E. J. (2012). How can a Bayesian approach inform neuroscience? European Journal of Neuroscience, 35(7), 1169–1179. https://doi.org/10.1111/j.1460-9568.2012.08010.x

O'Reilly, J. X., Jbabdi, S., & Behrens, T. E. J. (2012). How can a Bayesian approach inform neuroscience? European Journal of Neuroscience, 35(7), 1169–1179.

OBE, A. J., OBE, M. E. K., Frank, I., & CBE, D. S. (2022, October). The report of the independent inquiry into child sexual abuse.

Ogden, P., Minton, K., & Pain, C. (2006). Trauma and the body: A sensorimotor approach to psychotherapy (norton series on interpersonal neurobiology). WW Norton & Company.

Ogden, P., Minton, K., & Pain, C. (2006). Trauma and the body: A sensorimotor approach

to psychotherapy (norton series on interpersonal neurobiology). WW Norton & Company.

Okasha, S. (2022). The evolution of Bayesian updating. Philosophy of Science, 80(5), 745–757.

Osherson, D. N., & Smith, E. E. (1981). On the adequacy of prototype theory as a theory of concepts. Cognition, 9(1), 35-58.

Ozdemir, E., MacBeth, A., & Griffiths, H. (2024). Pathways from childhood trauma to aberrant salience: A structural equation approach to mentalization model. Psychology and Psychotherapy: Theory, Research and Practice, 97(1), 157-172.

Pablé, A. (2020). Integrating linguistic relativity. Language & Communication, 75, 94-102.

Paracelsus. (as cited in Jung, C. G. [1969]). Psychology and alchemy (Collected Works Vol. 12). Princeton University Press.

Park, C. L., & Ai, A. L. (2006). Meaning making and growth: New directions for research on survivors of trauma. Journal of loss and trauma, 11(5), 389-407.

Pascual-Leone, A., Amedi, A., Fregni, F., & Merabet, L. B. (2005). The plastic human brain cortex. Annual Review of Neuroscience, 28, 377–401.

Patel, R., Spreng, R. N., Shin, L. M., & Girard, T. A. (2012). Neurocircuitry models of posttraumatic stress disorder and beyond: A meta-analysis of functional neuroimaging studies. Neuroscience & Biobehavioral Reviews, 36(9), 2130–2142.

Payne, P., Levine, P. A., & Crane-Godreau, M. A. (2015). Somatic experiencing: Using interoception and proprioception as core elements of trauma therapy. Frontiers in Psychology, 6, 93. https://doi.org/10.3389/fpsyg.2015.00093

Peckham, E. (2023). The neuroplastic narrative: Trauma, adaptation, and post-pathological identity. Trauma Theory Review, 5(1), 22–46.

Peckham, H. (2023). Introducing the Neuroplastic Narrative: A non-pathologizing biological foundation for trauma-informed and adverse childhood experience aware approaches. Frontiers in Psychiatry, 14, 1147956. https://doi.org/10.3389/fpsyt.2023.1147956

Peckham, R. (2023). Fear: An alternative history of the world. Profile Books.

Peckham, R. (2023). The neuroplastic narrative: Adaptive systems and suffering. Medical Humanities, 49(1), 29–37. https://doi.org/10.1136/medhum-2021-012263

Penny, W. D., Zeidman, P., & Burgess, N. (2013). Forward and backward inference in spatial cognition. PLoS computational biology, 9(12), e1003383.

Penny, Will D., Klaas E. Stephan, Jean Daunizeau, Maria J. Rosa, Karl J. Friston, Thomas M. Schofield, and Alex P. Leff. "Comparing families of dynamic causal models." PLoS computational biology 6, no. 3 (2010): e1000709.

Penrose, R., & Hameroff, S. R. (1996). Conscious events as orchestrated spacetime selections. Journal of Consciousness Studies, 3(1), 36–53.

Penrose, R., & Hameroff, S. R. (1996). Orchestrated reduction of quantum coherence in brain microtubules: A model for consciousness. Mathematics and Computers in Simulation, 40(3-4), 453–480.

Perec, G. (1969). La Disparition. Paris: Denoël.
→ Translated as: Perec, G. (2005). A Void (G. Adair, Trans.). London: Vintage.

Perec, G. (1972). Les Revenentes. Paris: Gallimard.

Perec, G. (1975). Tentative d'épuisement d'un lieu parisien. Paris: Christian Bourgois.
→ Translated as: Perec, G. (2010). An Attempt at Exhausting a Place in Paris (M. Lowenthal, Trans.). Cambridge, MA: Wakefield Press.

Perec, G. (1978). Je me souviens. Paris: Hachette.
→ Inspired by: Brainard, J. (1970). I Remember. New York: Angel Hair Books.

Perec, G. (1978). La Vie mode d'emploi. Paris: Hachette.
→ Translated as: Perec, G. (1987). Life: A User's Manual (D. Bellos, Trans.). London: Collins Harvill.

Perlovsky, L. (2006). Toward physics of the mind: Concepts, emotions, and symbols in neural networks. Physics of Life Reviews, 3(1), 23–
55. https://doi.org/10.1016/j.plrev.2006.03.002

Pessoa, L. (2025). The entangled brain: How perception, cognition, and emotion are woven together. MIT Press.

Piaget, J. (2013). *The construction of reality in the child*. Routledge.

Pienaar, J. (2021). QBism and relational quantum mechanics compared. Foundations of Physics, 51(5), 96.

Pillen, A. (2016). Language, translation, trauma. Annual Review of Anthropology, 45(1), 95-111.

Piltan, M., Moradi, A. R., Choobin, M. H., Azadfallah, P., Eskandari, S., & Hitchcock, C. (2021). Impaired autobiographical memory flexibility in Iranian trauma survivors with posttraumatic stress disorder. Clinical Psychological Science, 9(2), 294-301.

Pint, K. (2013). Bachelard's House Revisited: Toward a New Poetics of Space. Interiors, 4(2), 109-123.

Pint, R. (2013). The labyrinth of symbols: Explorations in alchemical language. Alchimia Press.

Pittella, F. (2024). Human symbolic evolution and trauma integration: Reconsidering ontogenesis in social cognition. Behavioral and Brain Sciences. [In press].

Pittella, J. E. H. (2024).

The uniqueness of the human brain: A review. Dementia & Neuropsychologia, 18(1), 1–9.

Pittella, L. (2024). Symbolic cognition and the evolution of the social brain. Trends in Cognitive Sciences, 28(1), 21–35.

Plant, M., Miller, P., & Plant, M. (2004). Childhood and adult sexual abuse: Relationships with alcohol and other psychoactive drug use. Child Abuse Review: Journal of the British Association for the Study and Prevention of Child Abuse and Neglect, 13(3), 200-214.

Polchinski, J. (2005). String theory (p. 552).

Porges, S. W. (2007). The polyvagal perspective. Biological Psychology, 74(2), 116–143. https://doi.org/10.1016/j.biopsycho.2006.06.009

Pothos, E. M., & Busemeyer, J. R. (2021). Quantum cognition. Annual Review of Psychology, 72, 749–778. https://doi.org/10.1146/annurev-psych-032420-031043

Pothukuchi, R. P., Lufkin, L., Shen, Y. J., Simon, A., Thorstenson, R., Trevisan, B. E., ... & Bhattacharjee, A. (2023). The QUATRO Application Suite: Quantum Computing for Models of Human Cognition. arXiv preprint arXiv:2309.00597.

Putnam, F. W., & Trickett, P. K. (1993). Child sexual abuse: A model of chronic trauma. Psychiatry, 56(1), 82–95. https://doi.org/10.1080/00332747.1993.11024623

Pynoos, R. S., Steinberg, A. M., Layne, C. M., Liang, L.-J., Vivrette, R. L., Briggs, E. C.,

Kisiel, C., Habib, M., Belin, T. R., & Fairbank, J. A. (2014). Modeling constellations of trauma exposure in the National Child Traumatic Stress Network Core Data Set. Psychological Trauma: Theory, Research, Practice, and Policy, 6(S1), S9–S17.

Qureshi, S. U., Long, M. E., Bradshaw, M. R., Pyne, J. M., Magruder, K. M., Kimbrell, T., ... & Kunik, M. E. (2011). Does PTSD impair cognition beyond the effect of trauma?. The Journal of neuropsychiatry and clinical neurosciences, 23(1), 16-28.

Rabeyron, T. (2022). Psychoanalytic psychotherapies and the free energy principle. Frontiers in Human Neuroscience, 16, 929940.

Rabeyron, T., & Massicotte, C. (2020). Entropy, free energy, and symbolization: free association at the intersection of psychoanalysis and neuroscience. Frontiers in Psychology, 11, 366.

Radstone, S. (2007). Trauma theory: Contexts, politics, ethics. Paragraph, 30(1), 9–29. https://doi.org/10.3366/para.2007.30.1.9

Rajiva, M., & Takševa, T. (2021). Thinking against trauma binaries: the interdependence of personal and collective trauma in the narratives of Bosnian women rape survivors. Feminist Theory, 22(3), 405-427.

Rao, R. P. N., & Ballard, D. H. (1999). Predictive coding in the visual cortex: A functional interpretation of some extra-classical receptive-field effects. Nature Neuroscience, 2(1), 79–87. https://doi.org/10.1038/4580

Rao, R. P., & Ballard, D. H. (1999). Predictive coding in the visual cortex: a functional interpretation of some extra-classical receptive-field effects. Nature neuroscience, 2(1), 79-87.

Rauch, S. L., Shin, L. M., & Phelps, E. A. (1996). Neurocircuitry models of posttraumatic stress disorder and extinction: Human neuroimaging research—past, present, and future. Biological Psychiatry, 60(4), 376–382.

Reavey, P., & Brown, S. D. (2009). The mediating role of objects in recollections of adult women survivors of child sexual abuse. Culture & Psychology, 15(4), 463-484.

Reis, B., Rizzo, A. S., Koenig, S. T., & Wermter, S. (2023). Probabilistic neural computation for PTSD detection and understanding. Frontiers in Computational Neuroscience, 17, 1170272. https://doi.org/10.3389/fncom.2023.1170272

Reis, R., & Ortega, F. (2021). Neuroscientific perspectives for a theory of trauma: a critical review of integrative models of biology and culture. Cadernos de Saúde Pública, 37, e00352820.

Rellini, A. H., Vujanovic, A. A., Gilbert, M., & Zvolensky, M. J. (2012). Childhood maltreatment and difficulties in emotion regulation: Associations with sexual and relationship satisfaction among young adult women. Journal of Sex Research, 49(5), 434-

442.

Ricoeur, P. (1991). Narrative identity. In D. Wood (Ed.), On Paul Ricoeur: Narrative and interpretation (pp. 188–199). Routledge.

Ricoeur, P. (2004). The rule of metaphor: The creation of meaning in language. Routledge.

Robinaugh, D. J., Hoekstra, R. H., Toner, E. R., & Borsboom, D. (2020). The network approach to psychopathology: A review of the literature 2008–2018 and an agenda for future research. Psychological medicine, 50(3), 353-366.

Rodriguez, N., Kemp, H. V., & Foy, D. W. (1998). Posttraumatic stress disorder in survivors of childhood sexual and physical abuse: A critical review of the empirical research. Journal of Child Sexual Abuse, 7(2), 17-45.

Rogers, T. T., & McClelland, J. L. (2014). Parallel distributed processing at 25: Further explorations in the microstructure of cognition. Cognitive science, 38(6), 1024-1077.

Rokita, K., Holleran, L., Dauvermann, M. R., et al. (2020). Childhood trauma, brain structure and emotion recognition in patients with schizophrenia and healthy participants. Social Cognitive and Affective Neuroscience, 15(12), 1281–1290. https://doi.org/10.1093/scan/nsaa161

Rosenblau, G., Frolichs, K., & Korn, C. W. (2023). A neuro-computational social learning framework to facilitate transdiagnostic classification and treatment across psychiatric

disorders. Neuroscience & Biobehavioral Reviews, 149, 105181.

Routledge.Spence, G., & Joseph, S. (2016). Coaching for post-traumatic growth: An appropriate response to the devastations of life. The Sage handbook of coaching, 399-418.

Rovelli, C. (1996). Relational quantum mechanics. International journal of theoretical physics, 35, 1637-1678.

Rovelli, C. (1996). Relational quantum mechanics. International journal of theoretical physics, 35, 1637-1678.

Rovelli, C. (2009). Forget time. arXiv preprint arXiv:0903.3832.

Rovelli, C. (2019). Neither presentism nor eternalism. Foundations of Physics, 49(12), 1325-1335.

Rovelli, C. (2019). The order of time. Penguin.

Rovelli, C. (2022). Helgoland: Making sense of the quantum revolution. Penguin.

Roy, A., Bernier, R. A., Wang, J., Benson, M., French Jr, J. J., Good, D. C., & Hillary, F. G. (2017). The evolution of cost-efficiency in neural networks during recovery from

traumatic brain injury. PloS one, 12(4), e0170541.

Rubin, D. C., Boals, A., & Berntsen, D. (2008). Memory in posttraumatic stress disorder: properties of voluntary and involuntary, traumatic and nontraumatic autobiographical memories in people with and without posttraumatic stress disorder symptoms. Journal of Experimental Psychology: General, 137(4), 591.

Sabbe, B. G. C., & Giltay, E. J. (2024). Complex dynamical systems in psychiatry: an integrative approach. Tijdschrift Voor Psychiatrie, 66(5), 259-264.

Saha, S., Chung, M. C., & Thorne, L. (2011). A narrative exploration of the sense of self of women recovering from childhood sexual abuse. Counselling Psychology Quarterly.

Salami, A., et al. (2021). EEG markers in depersonalization/derealization .

Salter, M. (2018). Organised abuse: The current state of knowledge and its implications for social work. British Journal of Social Work, 48(1), 1–
18. https://doi.org/10.1093/bjsw/bcx031

Sanandrés, E., & Montenegro, J. S. O. (2015). Una aplicación de topic modeling para el estudio del trauma: El caso de Chevron-Texaco en Ecuador. Investigación & Desarrollo, 23(2), 228-255.

Sapir, E. (1921). Language: An introduction to the study of speech. Harcourt, Brace.

Saussure, F. de. (1983). Course in general linguistics (R. Harris, Trans.). Duckworth. (Original work published 1916)

Sawyer, R. K. (2002). Emergence in psychology: Lessons from the history of non-reductionist science. Human Development, 45(1), 2–28

Schauer, M., & Elbert, T. (2010). The psychological impact of child soldiering. In R. Kohrt & I. M. Barron (Eds.), The Mental Health of Children Affected by Armed Conflict (pp. 311–342). Springer.

Schemmel, M. (2015). Historical epistemology of space: From primate cognition to spacetime physics. Springer.

Schiebener, J., & Brand, M. (2015). Affective and cognitive mechanisms of risky decision making. Frontiers in Neuroscience, 9, 272. https://doi.org/10.3389/fnins.2015.00272

Schirmer, M., Nolasco, I. M. O., Mosca, E., Xu, S., & Pfeffer, J. (2023, June). Uncovering trauma in genocide tribunals: An nlp approach using the genocide transcript corpus. In Proceedings of the Nineteenth International Conference on Artificial Intelligence and Law (pp. 257-266).

Schlumpf, Y. R., Nijenhuis, E. R., Klein, C., Jäncke, L., & Bachmann, S. (2021). Resting-state functional connectivity in patients with a complex PTSD or complex dissociative disorder before and after inpatient trauma treatment. Brain and Behavior, 11(7), e02200.

Schlumpf, Y. R., Nijenhuis, E. R., Klein, C., Jäncke, L., & Bachmann, S. (2021). Resting-state functional connectivity in patients with a complex PTSD or complex dissociative disorder before and after inpatient trauma treatment. Brain and Behavior, 11(7), e02200.

Schmahmann, J. D., Guell, X., Stoodley, C. J., & Halko, M. A. (2019). The theory and neuroscience of cerebellar cognition. Annual Review of Neuroscience, 42, 337–364

Schore, A. N. (2009). Relational trauma and the developing right brain. Annals of the New York Academy of Sciences, 1159(1), 189–203. https://doi.org/10.1111/j.1749-6632.2009.04474.x

Schwanberg, J. S. (2010). Does language of retrieval affect the remembering of trauma? Journal of Trauma & Dissociation, 11(1), 44–56.

Schwartz, J. M., Stapp, H. P., & Beauregard, M. (2005). Quantum physics in neuroscience and psychology: A neurophysical model of mind–brain interaction. Philosophical Transactions of the Royal Society B: Biological Sciences, 360(1458), 1309–1327.

Sebald, W. G. (1998). The Rings of Saturn (M. Hamburger, Trans.). New Directions.

Sermijn, J., Devlieger, P., & Loots, G. (2008). The narrative construction of the self: Selfhood as a rhizomatic story. Qualitative inquiry, 14(4), 632-650.

Sewell, K. W., & Williams, A. M. (2002). Broken narratives: Trauma, metaconstructive gaps, and the audience of psychotherapy. Journal of Constructivist Psychology, 15(3), 205-218.

Shahri, H. (2022). Life, Entropy, Information, Emotions, and Trauma. International Body Psychotherapy Journal, 21(1), 87-104.

Shotter, J. (1993). *Conversational realities: Constructing life through language* (Vol. 11). Sage.

Simic, C. (2015). The Life of Images: Selected Prose. Harper Collins.

Smolensky, P. (1988). On the proper treatment of connectionism. Behavioral and brain sciences, 11(1), 1-23.

Solnit, R. (2006). A field guide to getting lost. Canongate.

Solnit, R. (2014). The faraway nearby. Penguin.

Sorkin, R. D. (1991). Spacetime and causal sets. Relativity and gravitation: Classical and quantum, 150-173.

Spivak, G. C. (1988). Can the subaltern speak? In C. Nelson & L. Grossberg (Eds.), Marxism and the interpretation of culture (pp. 271–313). University of Illinois Press.

Stapp, H. P. (1993). A quantum theory of the mind-brain interface. In Mind, matter, and quantum mechanics (pp. 145-172). Berlin, Heidelberg: Springer Berlin Heidelberg.

Stappenbeck, C. A., Reider, E. E., Badour, C. L., & Mun, C. J. (2023). Latent variable and Bayesian network modeling of PTSD symptoms: A cross-sectional and longitudinal approach. Psychological Trauma: Theory, Research, Practice, and Policy. Advance online publication. https://doi.org/10.1037/tra0001473

Stavropoulos, P. (2019). The principles of trauma-informed care and the need for cultural and organisational change. In Humanising Mental Health Care in Australia (pp. 307-318). Routledge.

Stefanovic, M., Ehring, T., Wittekind, C. E., Kleim, B., Rohde, J., Krüger-Gottschalk, A., Knaevelsrud, C., Rau, H.,

Schäfer, I., Schellong, J., Dyer, A., & Takano, K. (2022). Comparing PTSD symptom networks in type I vs. type II trauma survivors. European Journal of Psychotraumatology, 13(2), 2114260. https://doi.org/10.1080/20008198.2022.2114260

Stein, D. J., & Ludik, J. (Eds.). (1998). Neural networks and psychopathology: Connectionist models in practice and research. Cambridge University Press.

Sterling, P., & Eyer, J. (1988). Allostasis: A new paradigm to explain arousal pathways. In S. Fisher & J. Reason (Eds.), Handbook of life stress, cognition and health (pp. 629–649). John Wiley & Sons.

Stolorow, R. D. (2003). Trauma and human existence: Autobiographical, psychoanalytic, and philosophical reflections. New York: The Analytic Press.

Stolorow, R. D. (2011). Trauma and human existence: Autobiographical, psychoanalytic, and philosophical reflections. Routledge.

Stolorow, R. D. (2016). Trauma and temporality. Psychoanalytic Psychology, 33(4), 658–661. https://doi.org/10.1037/pap0000076

Sumner, J. A. (2012). The mechanisms underlying overgeneral autobiographical memory: An evaluative review of evidence for the CaR-FA-X model. Clinical psychology review, 32(1), 34-48.

Suo, X., Lei, D., Li, W., Yang, J., Li, L., Sweeney, J. A., & Gong, Q. (2020). Individualized prediction of PTSD symptom severity in trauma survivors from whole-brain resting-state functional connectivity. Frontiers in Behavioral Neuroscience, 14, 591514. https://doi.org/10.3389/fnbeh.2020.591514

Synnes, O., Romm, K. L., & Bondevik, H. (2021). The poetics of vulnerability: creative writing among young adults in treatment for psychosis in light of Ricoeur's and Kristeva's philosophy of language and subjectivity. Medicine, Health Care and Philosophy, 24(2), 173-187.

Tasker, F. (2003). Listening to survivors: Early development and the process of recovery. Journal of Family Therapy, 25(3), 234–254. https://doi.org/10.1111/1467-6427.00246

Tasker, R. (2003). Narrative and identity in acquired brain injury. Disability & Society, 18(7), 795–808.

Tasker, S. L. (2003). Acquired brain injury: Meaning making out of lived trauma. Illness, Crisis & Loss, 11(4), 337–350

Tasselli, S., & Kilduff, M. (2021). Network agency. Academy of Management Annals, 15(1), 68-110.

Tay, D. (2013). Metaphor in psychotherapy.

Tay, D., & Neimeyer, R. A. (2021). Making meaning with metaphor in grief therapy: A single-session segmental approach. Cognitive Linguistic Studies, 8(1), 152–174. https://doi.org/10.1075/cogls.00021.tay

Taylor, K. I., Devereux, B. J., & Tyler, L. K. (2011). Conceptual structure: Towards an integrated neurocognitive account. Language and cognitive processes, 26(9), 1368-1401.

Taylor, Y. (2008). The tip of the iceberg: Working on the Victoria Climbié data corpus project. Qualitative Research, 8(1), 115-135.

Teske, J. A. (2006). Neuromythology: Brains and stories. Zygon®, 41(1), 169-196.

Thayer, J. F., & Lane, R. D. (2000). A model of neurovisceral integration in emotion regulation and dysregulation. Journal of Affective Disorders, 61(3), 201–216. https://doi.org/10.1016/S0165-0327(00)00338-4

Theisen, B. (2006). A Natural History of Destruction: WG Sebald's The Rings of Saturn. Mln, 121(3), 563-581.

Thome, J., Terpou, B. A., McKinnon, M. C., & Lanius, R. A. (2019). The neural correlates of trauma-related autobiographical memory in posttraumatic stress disorder: A meta-analysis. Depression and Anxiety, 37(4), 321–335. https://doi.org/10.1002/da.22977

Thompson, N., & Walsh, M. (2010). The existential basis of trauma. Journal of Social Work Practice, 24(4), 377-389.

Till, K. E. (2012). Wounded cities: Memory-work and a place-based ethics of care. Political Geography, 31(1), 3–14.

Törrönen, J. (2022). Analyzing agency and identity navigation in addiction stories by drawing on actor-network theory and narrative positioning analysis. Drugs: Education, Prevention and Policy, 29(1), 70–79. https://doi.org/10.1080/09687637.2022.2035684

Trakas, M., Brudzińska, J., & Kusch, M. (Eds.). (2024). Memory and trauma: Philosophical perspectives. Springer.

Trakas, M., de Ávila, N., & Walsh, E. (2024). Introduction to Monographic Section: Memory and Trauma. Philosophical Perspectives.

Trueblood, J. S., Yearsley, J. M., & Pothos, E. M. (2017). A quantum probability framework for human probabilistic inference. Journal of Experimental Psychology: General, 146(9), 1307.

Trueblood, J., & Busemeyer, J. (2010). A comparison of the belief-adjustment model and the quantum inference model as explanations of order effects in human inference. In Proceedings of the Annual Meeting of the Cognitive Science Society (Vol. 32, No. 32).

Truskauskaite-Kuneviciene, I., Brailovskaia, J., Kamite, Y., Petrauskaite, G., Margraf, J., & Kazlauskas, E. (2020). Does trauma shape identity? Exploring the links between lifetime trauma exposure and identity status in emerging adulthood. Frontiers in psychology, 11, 570644.

Tsekeris, C. (2017). Contextualising the self in contemporary social science. In Revisiting the Self (pp. 17-30). Routledge.

Tseng, E., Ristenpart, T., & Dell, N. (2025). Mitigating Trauma in Qualitative Research Infrastructure: Roles for Machine Assistance and Trauma-Informed Design. Proceedings of the ACM on Human-Computer Interaction, 9(2), 1-37.

Tsuchiya, N., Bruza, P., Yamada, M., Saigo, H., & Pothos, E. M. (2025). Quantum-like qualia hypothesis: From quantum cognition to quantum perception. Frontiers in Psychology, 15, 1406459.

Tummons, J. (2020). Ontological pluralism, modes of existence, and actor-network theory: Upgrading Latour with Latour. Social Epistemology, 34(4), 303–314.

Tushman, M. L., & Romanelli, E. (1985). Organizational evolution: A metamorphosis model of convergence and reorientation. In L. L. Cummings & B. M. Staw (Eds.), Research in organizational behavior (Vol. 7, pp. 171–222). JAI Press.

Tuval-Mashiach, R., Freedman, S., Bargai, N., Boker, R., Hadar, H., & Shalev, A. Y. (2004). Coping with trauma: Narrative and cognitive perspectives. Psychiatry, 67(3), 280–293. https://doi.org/10.1521/psyc.67.3.280.48977

Ulman, R. B., & Brothers, D. (2013). The shattered self: A psychoanalytic study of trauma. Routledge.

Ulrich-Lai, Y. M., & Herman, J. P. (2009). Neural regulation of endocrine and autonomic stress responses. Nature Reviews Neuroscience, 10, 397–409. https://doi.org/10.1038/nrn2647

Uzan, P. (2023, September). From Classical Rationality to Quantum Cognition. In International Conference on Human and Artificial Rationalities (pp. 190-209). Cham:

Springer Nature Switzerland.

Vanaken, L., Smeets, T., Bijttebier, P., & Hermans, D. (2021). Keep calm and carry on: The relations between narrative coherence, trauma, social support, psychological well-being, and cortisol responses. Frontiers in psychology, 12, 558044.

van de Schoot, R., Broere, J. J., Perryck, K. H., Zondervan-Zwijnenburg, M. A., & van Loey, N. E. (2017). Analyzing small data sets using Bayesian estimation: The case of posttraumatic stress symptoms following mechanical ventilation in burn survivors. European Journal of Psychotraumatology, 8(1), 1372925. https://doi.org/10.1080/20008198.2017.1372925

van de Schoot, R., Schalken, N., & Olff, M. (2017). Systematic search of Bayesian statistics in the field of psychotraumatology. European Journal of Psychotraumatology, 8(sup1), 1375339.

van de Schoot, R., Winter, S. D., Ryan, O., Zondervan-Zwijnenburg, M., & Depaoli, S. (2017). A systematic review of Bayesian articles in psychology: The last 25 years. Psychological Methods, 22(2), 217–239. https://doi.org/10.1037/met0000100

van der Kolk, B. A. (1998). Trauma and memory. Psychiatry and Clinical Neurosciences, 52(S1), S52–S64. https://doi.org/10.1046/j.1440-1819.1998.0520s5S97.x

van der Kolk, B. A. (2014). The body keeps the score: Brain, mind, and body in the healing of trauma. Viking.

van der Kolk, B. A., Stone, L., West, J., Rhodes, A., Emerson, D., Suvak, M., &

Spinazzola, J. (2021). Yoga and post-traumatic stress disorder: A neurophysiological perspective and a call for integration. European Journal of Psychotraumatology, 12(1), 1–14.

Van der Westhuizen, M., Walker-Williams, H. J., & Fouché, A. (2023). Meaning making mechanisms in women survivors of childhood sexual abuse: A scoping review. Trauma, Violence, & Abuse, 24(3), 1363-1386.

Vanderbijl, A. (1996). The significances of bodily dissociation in the context of childhood sexual abuse: an anthropological approach.

Vanderveren, E., Bijttebier, P., & Hermans, D. (2017). The importance of memory specificity and memory coherence for the self: Linking two characteristics of autobiographical memory. Frontiers in psychology, 8, 2250.

Vandevoordt, R. (2016). Ruin, allegory, melancholy: On the critical aesthetics of W. G. Sebald's The Emigrants and The Rings of Saturn. Transformations, 1–12.

Varela, F. J. (1999). The specious present: A neurophenomenology of time consciousness.

Vass, J. (2017). Selfhood and its pragmatic coherence in the context of social entropy: towards a new framework of the social self. In Revisiting the Self (pp. 42-54). Routledge.

Vaswani, A., Shazeer, N., Parmar, N., Uszkoreit, J., Jones, L., Gomez, A. N., ... & Polosukhin, I. (2017). Attention is all you need. Advances in neural information processing systems, 30.

Veselova, E. (2019, June). Design for sustainable entangled human-nature systems. In Nordic Design Research Conference: Who Cares?. Nordic Design Research Society (NORDES).

Viard, A., Mutlu, J., Chanraud, S., Guenolé, F., Egler, P. J., Gérardin, P., ... & Guillery-Girard, B. (2019). Altered default mode network connectivity in adolescents with post-traumatic stress disorder. NeuroImage: Clinical, 22, 101731.

Vilares, I., & Kording, K. (2011). Bayesian models: the structure of the world, uncertainty, behavior, and the brain. Annals of the New York Academy of Sciences, 1224(1), 22-39.

Volgenau, K. M., Hokes, K. E., Hacker, N., & Adams, L. M. (2023). Network analysis approach to understanding the relationship between childhood trauma and wellbeing later in life. Child Psychiatry & Human Development, 54(4), 1127–1140.

Vygotsky, L. S. (1962). Thought and language. MIT Press.

Wagenmakers, E. J., Lee, M., Lodewyckx, T., & Iverson, G. J. (2008). Bayesian versus frequentist inference. Bayesian evaluation of informative hypotheses, 181-207.

Waller, N., & Scheidt, C. E. (2010). Narration as a means of restoring self-coherency:

Thoughts on processing traumatic experiences. Zeitschrift fur Psychosomatische Medizin und Psychotherapie, 56(1), 56-73.

Waller, N., & Scheidt, C.E. (2010). Narrative as a process of (re-)establishing self-coherence. Considerations on processing traumatic experiences. Journal of Psychosomatic Medicine and Psychotherapy , 56 (1), 56-73.

Waller, N., & Scheidt, C.E. (2010). Narrative as a process of (re-)establishing self-coherence. Considerations on processing traumatic experiences. Journal of Psychosomatic Medicine and Psychotherapy , 56 (1), 56-73.

Watts, D. J., & Strogatz, S. H. (1998). Collective dynamics of ‘small-world’networks. nature, 393(6684), 440-442.

Welton-Mitchell, C., McIntosh, D. N., & DePrince, A. P. (2013). Associations between thematic content and memory detail in trauma narratives. Applied Cognitive Psychology, 27(5), 555–566. https://doi.org/10.1002/acp.2923

Wertsch, J. V. (1984). The zone of proximal development: Some conceptual issues. New directions for child development.

White, L., Pothos, E., & Busemeyer, J. (2013). A quantum probability perspective on the nature of psychological uncertainty. In Proceedings of the Annual Meeting of the Cognitive Science Society (Vol. 35, No. 35).

White, M. (2024). Maps of narrative practice. WW Norton & Company.

White, M., & Epston, D. (1990). Narrative means to therapeutic ends. WW Norton & Company.

Whitehead, A. N. (2010). Process and reality. Simon and Schuster.

Whorf, B. L. (1956). Language, thought, and reality: Selected writings. MIT Press.

Wichert, A. (2021). Quantum cognition and the mind. Journal of Artificial Intelligence and Consciousness, 8(1), 1–23. https://doi.org/10.1142/S2705078521500017

Wiesepape, C. N., Smith, E. A., Muth, A. J., & Faith, L. A. (2025). Personal narratives in trauma-related disorders: contributions from a metacognitive approach and treatment considerations. Behavioral Sciences, 15(2), 150.

Wike, L. (2000). Photographs and signatures: absence, presence, and temporality in Barthes and Derrida.

Wildman, W. J. (2010). An introduction to relational ontology. The Trinity and an entangled world: Relationality in physical science and theology, 55-73.

Wilkinson, S., Dodgson, G., & Meares, K. (2017). Predictive processing and the varieties of psychological trauma. Frontiers in Psychology, 8, 1840.

Wilkinson, S., Dodgson, G., & Meares, K. (2017). Predictive processing and the varieties of psychological trauma. Frontiers in Psychology, 8, 1840.

Willig, C. (2013). Introducing qualitative research in psychology (3rd ed.). McGraw-Hill Education.

Wilson, J. P., & Lindy, J. D. (2013). Trauma, culture, and metaphor: Pathways of transformation and integration. Routledge.

Wise, J. (2015). School based programmes may help children to report sexual abuse, Cochrane review concludes. BMJ, 350.

Wittgenstein, L. (1975). Tractatus logico-philosophicus: English translation.

Wittgenstein, L. (1969). On Certainty (ed. Anscombe and von Wright).

World Health Organization. (1999). Report of the consultation on child abuse prevention, 29-31 March 1999, WHO, Geneva. In Report of the Consultation on Child Abuse Prevention, 29-31 March 1999, WHO, Geneva.

Wu, C. (2021). Narrative cinema and trauma epistemology: Between objectivity and symbolic healing. Visual Studies, 36(2), 153–169. https://doi.org/10.1080/1472586X.2021.1910612

Wu, H. Y.-J. (2021). From mechanical objectivity to narrative turn: How film has inspired

science on trauma. Journal of Trauma & Dissociation, 22(5), 501–519. https://doi.org/10.1080/15299732.2021.1929626

Yalch, M. M. (2016). Applying Bayesian statistics to the study of psychological trauma: A suggestion for future research. Psychological Trauma: Theory, Research, Practice, and Policy, 8(2), 249.

Yalch, M. M. (2023). A Bayesian approach to understanding posttraumatic stress disorder. Psychological Trauma: Theory, Research, Practice, and Policy, 15(1), 1–11. https://doi.org/10.1037/tra0001248

Yalch, M. M. (2023). Bayesian approaches in psychotraumatology: Conceptual and clinical implications. European Journal of Psychotraumatology, 14(1), 2229383. https://doi.org/10.1080/20008198.2023.2229383

Yalch, M. M. (2023). Bayesian methods for understanding complex trauma. In D. S. Weiss & M. J. Friedman (Eds.), Interventions for PTSD and complex PTSD (pp. 89–108). Springer.

Yanes, P. K., Roberts, J. E., & Carlos, E. L. (2008). Does overgeneral autobiographical memory result from poor mem

Yardley, L. (2000). Dilemmas in qualitative health research. Psychology & Health, 15(2), 215–228. https://doi.org/10.1080/08870440008400302

Yates, J. L., & Nasby, W. (1993). Dissociation, affect, and network models of memory:

An integrative proposal. Journal of Traumatic Stress, 6(3), 305-326.

Young, L. (1992). Sexual abuse and the problem of embodiment. Child Abuse & Neglect, 16(1), 89-100.

Yu, M., Linn, K. A., Shinohara, R. T., Oathes, D. J., Cook, P. A., Duprat, R., Moore, T. M., Oquendo, M. A., Phillips, M. L., McInnis, M., Fava, M., Trivedi, M. H., McGrath, P., Parsey, R., Weissman, M. M., & Sheline, Y. I. (2019). Childhood trauma history is linked to abnormal brain connectivity in major depression. Proceedings of the National Academy of Sciences, 116(17), 8582–8590.

Yukalov, V. I. (2023). Quantum operation of affective artificial intelligence. arXiv preprint arXiv:2305.08112.

Zaghi, A. E. (2024). Relational Quantum Dynamics (RQD): An Informational Ontology. arXiv preprint arXiv:2412.05979.

Zamora-López, G., Russo, E., Gleiser, P. M., Zhou, C., & Kurths, J. (2011). Characterizing the complexity of brain and mind networks. Philosophical Transactions of the Royal Society A: Mathematical, Physical and Engineering Sciences, 369(1952), 3730-3747.

Zaretsky, V. K. (2021). One More Time on the Zone of Proximal Development. Cultural-Historical Psychology, 17(2).

Zettle, R. D., Hayes, S. C., Barnes-Holmes, D., & Biglan, A. (2016). The Wiley Handbook of Contextual Behavioral Science.

Zhang, W., Kaldewaij, R., Hashemi, M. M., Koch, S. B., Smit, A., van Ast, V. A., ... & Roelofs, K. (2022). Acute-stress-induced change in salience network coupling prospectively predicts post-trauma symptom development. Translational psychiatry, 12(1), 63.

Zhao, H., Dong, D., Sun, X., Cheng, C., Xiong, G., Wang, X., & Yao, S. (2021). Intrinsic brain network alterations in non-clinical adults with a history of childhood trauma. European Journal of Psychotraumatology, 12(1), 1975951.

Zinn, H., & Damon, M. (1998). A people's history of the United States. New York: New Press.

Zwiebach, B. (2004). A first course in string theory. Cambridge university press.

Appendix A
Table 1
Coding Table – Thematic Matrix

Theme	Code	Testimony Excerpt	Interpretive Memo
5.1 Narrative Disjunction and Temporal Collapse	Temporal fragmentation	"I lose days, months… it just cuts out, like a film reel."	Discontinuous recall; metaphor illustrates predictive-processing breakdown.
	Retrospective reframing	"…for years I thought I was in control… then realised I was groomed."	Adult perspective reframes agency as manipulation.
	Conflicted timeline	"I don't know what year it was… maybe 10? Or 12?"	Inexact time markers signal disrupted sequencing.
	Persistent recall	"In my 70s… a week never goes by I don't think about it."	Vivid recall persists across decades.
	Trigger-induced collapse	"Fruit flies… 40 years later still a trigger."	Sensory cue collapses past and present.
5.2 Metaphor, Symbolic Mediation, and Collapse	Metaphoric substitution	"Fruit flies… still a trigger."	Metaphor substitutes for abuse detail.
	Shadow imagery	"You have many 'shadow memories'…"	Visual metaphor for inaccessible memory.
	Sensory-affective displacement	"That sense of feeling gross and dirty…"	Encodes embodied affect without detail.
	Euphemistic obliqueness	"It was fun and secretive… and okay (later reframed)."	Euphemism as protective device.

5.3 Ontological Breakdown and Affective Disintegration	Emotional contradiction	"He's such an evil man… I lost myself."	Shifts between blame and dissolution.
	Disidentification & fusion	"As far as I was concerned… I will die for this man."	Identity fused with perpetrator.
	Self-blame	"I blamed myself… couldn't ask for help."	Self-blame obstructs help-seeking.
	Internalised culpability	"Maybe I'd brought it on myself…"	Persistent attribution of blame.
	Somatic alienation	"Living 'out of body' most of your life."	Dissociation from bodily self.
	Psychological collapse	"I'm… a psychological wreck."	Global dysfunction defined by trauma.
5.4 Networked Agency and Systemic Rupture	Delegitimised disclosure	"Nobody ever asked me if this was true."	Institutional silence embeds complicity.
	Symbolic invalidation	"Teachers joked it was a 'relationship.'"	Institutional discourse reframed abuse.
	Institutional mockery	"Staff would joke… 'your new boyfriend?'"	Ridicule reinforced betrayal.
	Protection of perpetrator	"I became very protective of him…"	Grooming reversed survivor's loyalty.

5.5 Predictive–Quantum Inference and Epistemic Instability	Contradictory belief states	"I kidded myself he loved me."	Conflicting states (love vs. abuse).
	Sudden reinterpretation	"It blew me apart when I saw the manipulations."	Abrupt collapse into recognition.
	Conditional moral framing	"I didn't deserve it… but it was a terrible price."	Moral clarity with enduring loss.
	Recognition of manipulation	"All affection… part of the grooming plan."	Affection reframed as coercion.
5.6 Autobiographical Reconstruction and Narrative Repair	Cognitive reappraisal	"…it wasn't a relationship; I was groomed."	Abuse redefined as coercion.
	Linguistic anchoring	"It was fun and secretive… (corrected)."	Euphemism replaced with moral clarity.
	Life-course counterfactual	"…if it hadn't happened, life may have been different."	Counterfactuals as meaning-making.
	Symbolic closure act	"Burning my school tie and uniform…"	Ritualised act of reclaiming agency.

Appendix B

Table 2

Coding Framework – Linguistic and Temporal Disruptions in CSA Testimonies (Truth Project, IICSA)

Code	Description	Example Quote
1.1 Metaphorical & Indirect Language	Use of metaphor/symbolic language for abuse.	"I do now believe that I was his slave..."
1.2 Non-Specific References	Vague terms replace explicit detail.	"It", "what happened", "this."
1.3 Euphemistic Terminology	Socially acceptable language normalises abuse.	"Teachers used to joke about it being a 'relationship.'"
1.4 Impact-Focused Description	Focus on effects rather than events.	"...the nightmares and the depression... has never gone away."
1.5 Role-Based References	Framing abuse through roles/actions.	"I became a slave to him."
2.1 Fragmented/Shadow Memories	Incomplete or inaccessible recall.	"You have many 'shadow memories'..."
2.2 Temporal Collapsing via Triggers	Sensory cues collapse past and present.	"Fruit flies… 40 years later are a trigger."
2.3 Retrospective Reframing	Adult perspective reinterprets events.	"...then you realise... I was groomed as a child."
2.4 Persistent Vivid Memory	Long-term retention of sensory detail.	"I looked in the mirror… my back was black and blue."
2.5 Cyclical Temporal Intrusions	Past intrudes repeatedly into present.	"A week never goes by without thinking about it."
3.1 Tense Shifts	Switching past/present tense mid-narrative.	"He 'loved me'… I do now believe..."
3.2 Circularity & Repetition	Repetition of phrases or descriptors.	"I paid a terrible price… a terrible price to pay."

3.3 Explicit Re-Evaluation Markers	Signals retrospective insight.	"It blew me apart when I saw his manipulations."
3.4 Present Tense for Past Events	Current tense for historical events.	"He's such an evil man..."
3.5 Ellipsis & Pauses	Fragmentation from overwhelm.	"...crashing realisation that..."
4.1 Minimisation vs Recognition	Downplaying coexists with awareness.	"Maybe I'd brought it on myself…"
4.2 Attachment vs Horror	Admiration shifts to horror.	"As far as I was concerned… I will die for this man."
4.3 'Relationship' vs Grooming	Shift from affection to grooming awareness.	"Nobody ever asked me if this was true."
4.4 Detachment vs Persistent Memory	Numbness alternates with vivid recall.	"There were years I didn't think about it..."
4.5 Numbness vs Intensity	Repression followed by affective release.	"The repression… manifested a raging wreck."
5.1 Struggles with Expression	Difficulty articulating trauma.	"All I could think about... I couldn't get the memories out."
5.2 Dissociation & Disembodiment	Life experienced as detached from body.	"Living 'out of body' most of your life..."
5.3 Memory Gaps & Shadow Knowledge	Missing memory disrupts self-coherence.	"I lose days, months… like a film reel."
5.4 Triggered Affect Responses	Specific triggers evoke strong affect.	"...that sense of feeling gross and dirty..."
5.5 Self-Blame & Identity Conflict	Guilt/confusion due to grooming.	"I blamed myself – you can't ask for help if you think you are to blame."
5.6 Lost Self-Narratives	Mourning disrupted life trajectory.	"…if it hadn't happened, my life may have been different."
5.7 Persistent Anger	Anger at abusers/institutions.	"I took great pleasure in burning my school tie."

Appendix C: Extracts from Truth Project

Participants described their experiences in their own words, often combining vivid sensory memories with reflections on long-term impacts.

Testimonies were typically fragmented, shifting between past and present tense, and often contained pauses or hesitations when describing the abuse.

Many accounts were characterised by emotional intensity, with participants sometimes crying, laughing, or becoming withdrawn mid-sentence.

Others spoke in a detached or matter-of-fact way, which may reflect coping mechanisms developed over time.

Testimonies often moved non-linearly through time, shifting abruptly from childhood events to current-day impacts.

Some included specific details such as names of teachers, school buildings, or uniforms, while others remained deliberately vague.

Several participants used metaphorical language—such as describing abuse as being “invisible but everywhere” or life afterwards as “a shadow following me”—to convey the enduring and pervasive nature of their experiences.

In all cases in the qualitative sample, participants reported that they were sexually abused multiple times by the same perpetrator(s). As was shown in the quantitative data, most participants reported that sexual abuse started on school premises and in some instances then moved to other locations . . . In one case, the sexual abuse took place in school premises in 'plain sight', when the perpetrator sexually abused the victim at the front of the class, where the participant reported that "...he used to put his hand up my shorts" [Truth Project participant sexually abused in the context of schools].

"...he used to put his hand up my shorts..So, I'm standing there in absolute agony, but I didn't realise how badly I'd really been flogged ... I looked in the mirror, and to this day I could not believe the injuries: the whole of my back from the top was black and blue; you couldn't describe how black it was, and it dripped blood where the skin had been broken”.[Truth Project participant sexually abused in the context of schools].

"You know that you don't know half of what happened to you as a child. You have many

‘shadow memories’... Like having a partial view of something just to one side of your vision but mainly out of view. You live your life knowing you will never know/recall what happened to you because it was simply too traumatic." [Truth Project participant sexually abused in the context of schools] (5.1, 5.2; cf. 6.1, 6.2, 6.3)

"I lose days, months… it just cuts out, like a film reel." [Truth Project participant sexually abused in the context of schools] (5.1; cf. 6.1)

"Living ‘out of body’ most of your life. It is only in the last two years that I have learned how to come back into my body where I can now feel my emotions." [Truth Project participant sexually abused in the context of schools] (5.3; cf. 6.3)

At the time of the sexual abuse, participants described a range of coping mechanisms. Some described an urge to carry on as 'normal' and "endure" the abuse [Truth Project participant sexually abused in the context of schools]. One participant said:

"When I left the school, I took great pleasure in burning my school tie and uniform as a final incantation to the establishment that let me down so badly" [Truth Project participant sexually abused in the context of schools].

(5.4 Networked Agency and Systemic Rupture; cf. 6.4 Networked Agency; 5.6; cf. 6.6 Autobiographical Reconstruction))

Some described an urge to carry on as “normal” and “endure” the abuse. (5.4 Networked Agency and Systemic Rupture; cf. 6.4 Networked Agency)

“I’m [in my 70s] and a week never goes by that I don't think about it. I can see the man. I can see his shape; I can see his hands. I can see him as if it was yesterday. …”

[Truth Project participant sexually abused in the context of schools]

"I survived by kidding myself that he ‘loved me’ really." [Truth Project participant sexually abused in the context of schools] (5.5; cf. 6.5 Quantum Inference Patterns)

"...he used to put his hand up my shorts." [Truth Project participant sexually abused in the context of schools] (5.3; cf. 6.3)

“I feel, I do now believe that I was his slave. I feel like I became a slave to him for sex. I was his sex slave. And that's the only way that I can put it.”

[Truth Project participant sexually abused in the context of schools]

"...he used to put his hand up my shorts… So, I’m standing there in absolute agony, but I didn’t realise how badly I’d really been flogged… I looked in the mirror, and to this day I could not believe the injuries: the whole of my back from the top was black and blue; you couldn’t describe how black it was, and it dripped blood where the skin had been broken." [Truth Project participant sexually abused in the context of schools] (5.3; cf. 6.3)

“ . . . we've had this very hot summer last year. In our house it were plagued by fruit flies by the fruit that's slightly going off, you get little fruit flies and it's things like that that there are, you know. 40 years later are a trigger point still”.

[Truth Project participant sexually abused in the context of schools] (5.2; cf. 6.2)

"All I could think about all day and all night was about what had happened again… I couldn’t get the memories out of my mind." [Truth Project participant sexually abused in the context of schools] (5.1; cf. 6.1)

“There was probably a good few years where I didn't think about it, and I'm aware now that I was. (was thinking about it subconsciously, but I would completely bin it, even to myself. I wouldn't think about it, it was gone)”.

[Truth Project participant sexually abused in the context of schools] (5.3; cf. 6.3)

Other reminders were less specific to the details of the sexual abuse. Participants explained that more general discussions around child sexual abuse could cause them to remember an aspect of the abuse. Many participants described the impact of media coverage, particularly of sexual abuse that shared some similarity with the participant's experiences. These included storylines in soap operas, documentaries and news coverage

"I blamed myself – you can’t ask someone for help if you think you are to blame." [Truth

Project participant sexually abused in the context of schools] (5.4; cf. 6.4)

"I became very protective of him, because [perpetrator] said, ‘If you love me…’ He always said, ‘I’m risking my life. I’m risking my job.’" [Truth Project participant sexually abused in the context of schools] (5.4; cf. 6.4)

" Several of the staff at boarding school knew about this 'relationship' and would joke about it asking me, laughing, "Where is your new boyfriend now?" I only learned this year that he had told them that I wanted this relationship and that I had initiated it. I guess they believed him. Nobody ever asked me if this was true.”

[Truth Project participant sexually abused in the context of schools] (5.4; cf. 6.4)

Reaching a certain age was described by participants as something that prompted them to revisit and reinterpret their experiences. It caused a heightened sense of the impact of sexual abuse and of vulnerability. For example, thoughts about the sexual abuse resurfaced or were more persistent when participants became the same age as the perpetrator was when he or she sexually abused the participant, or when young family members reached the age that the participant was when he or she was sexually abused.

"..... for a lot of years, I'd thought, well, you know, I'd assimilated this experience and I was in control, but then you realise, when you are [the same age as perpetrator], that 15's -

they're children. ... The, kind of - like I say, the, sort of, crashing realisation that ... no, it wasn't a relationship; I was groomed as a child and groomed into thinking that it was fun and secretive and that it was completely okay.

[Truth Project participant sexually abused in the context of schools] (5.5; cf. 6.5, 6.6)

“He’s [perpetrator] such an evil… man… I completely lost myself.” [Truth Project participant sexually abused in the context of schools] (5.3; cf. 6.3)

“So, I paid a terrible price, really, for the abuse I suffered, a terrible price. I didn't deserve it, my friends say I didn't deserve it, but it was a terrible price to pay. …”

[Truth Project participant sexually abused in the context of schools] (5.3; cf. 6.3)

“He [friend] was silent throughout the whole thing, and you know his face was just like stony. And that went on for about 15 minutes and at the end of it he just looked at me and he said, "Oh I thought it was just me””

" [Truth Project participant sexually abused in the context of schools] (5.6; cf. 6.6)

“Maybe I'd brought it on myself. I asked for it. So many things. I just blamed myself continuously. Not once did I ever think that he would be to blame. I always thought that, and I still do”.

[Truth Project participant sexually abused in the context of schools] (5.4; cf. 6.4)

“As far as I was concerned, in my eyes he was almost like God. ... not only did I fancy him in my brain, not only did I love him, I felt like, you know, I worshipped him. Like he comes before my mum, he comes before my dad - he comes before my brothers, he comes before my sisters, he comes before myself; I will die for this man”.

[Truth Project participant sexually abused in the context of schools] (5.4; cf. 6.4)

“It took me many years of therapy to realise: one that l'd been sexually abused; two that it wasn't my fault. I wasn't to blame; three that he [perpetrator] didn't love me. All the expressions of affection had simply been part of the grooming plan to lure me to his end goal of using me for his sexual gratification ... . It blew me apart when I saw all his manipulations for what they were”.

[Truth Project participant sexually abused in the context of schools] (5.6; cf. 6.6)

“I suppose the repression of what had happened manifested a raging, angry, dysfunctional, post-traumatic syndrome-type person. I'm dysfunctional, I'm a wreck; I'm a psychological total nervous wreck”.

[Truth Project participant sexually abused in the context of schools] (5.3; cf. 6.3)

Many participants spoke of experiencing ongoing nightmares and depression.

“… but the nightmares and the memories were just - they were there, and the depression, really, has never gone away”.

[Truth Project participant sexually abused in the context of schools] (5.3; cf. 6.3)

Participants described how certain events, actions or objects could cause them to re-experience the emotions, thoughts or physiological experiences of the sexual abuse, which impacted their recovery. Many triggers were related to specific details of the sexual abuse suffered. For example, one participant explained that being touched in certain ways or specific things being said would induce "that sense of feeling gross and dirty..."

[Truth Project participant sexually abused in the context of schools] (5.3; cf. 6.3)

"… having reached the age I am, I'm thinking, well, could my life - I mean, I know it's abstract, but if it hadn't have happened, my life may have been different, you know? But we can never say that, can we?"

[Truth Project participant sexually abused in the context of schools] (5.6; cf. 6.6)