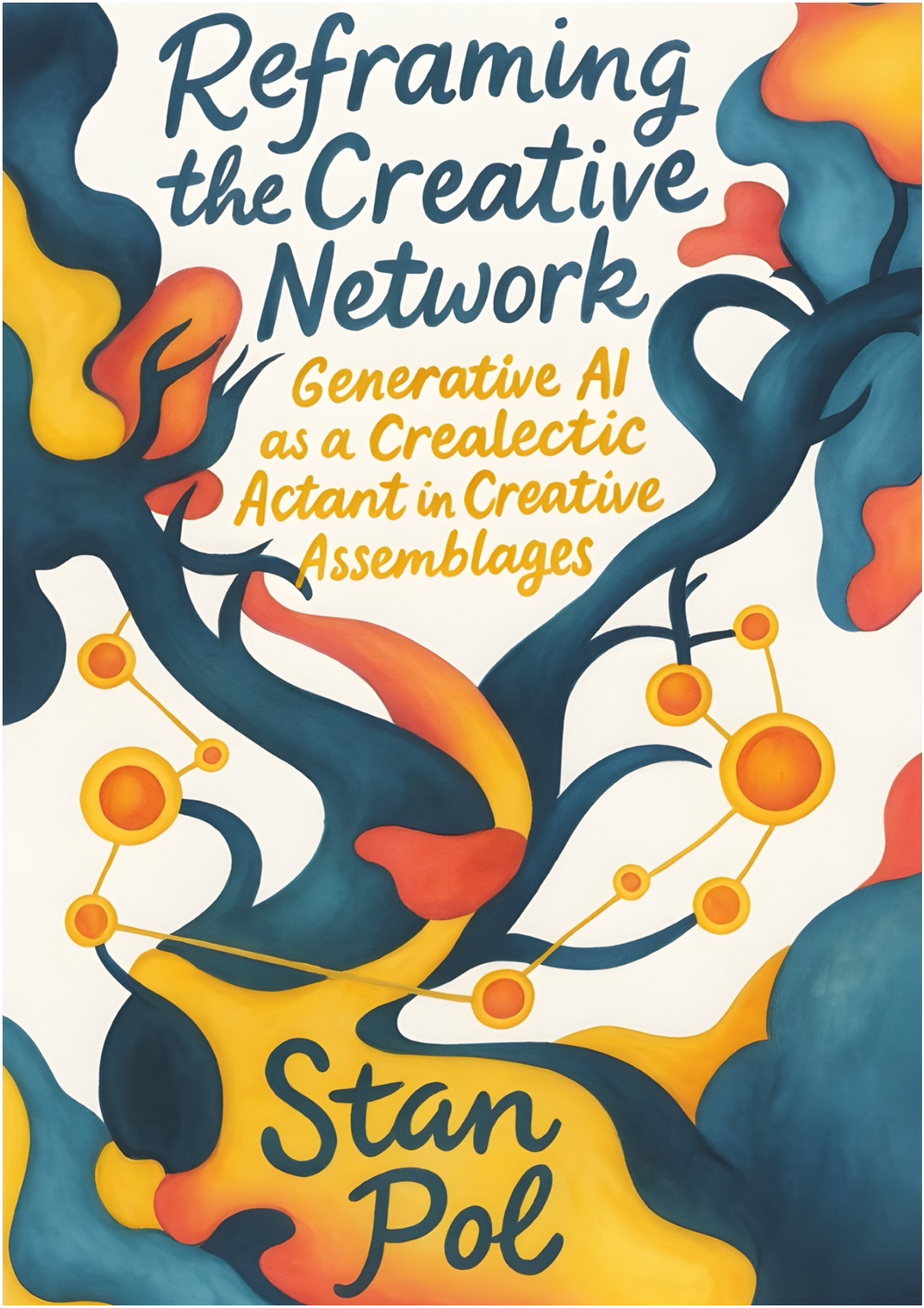
Reframing the Creative Network
Generative AI as a Crealectic Actant in Creative Assemblages
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ABSTRACT

This thesis investigates how generative artificial intelligence (AI) can function as a crealectic actant, an entity that collaboratively reshapes human creativity, challenging conventional models of solitary authorship and inviting new forms of creative agency. Drawing from distributed creativity, actor-network theory, crealectics, and posthumanist ethics, it explores how AI might participate meaningfully in creative processes.

Using a speculative design approach, the research constructs four scenario quadrants defined by two uncertainties: AI autonomy levels and societal acceptance of AI-generated content. These quadrants—craft renaissance, co-pilot paradigm, digital resistance, and machine authorship—structure an exploration of potential futures for human-AI creativity. The co-pilot paradigm, combining low AI autonomy with high societal acceptance, is examined in depth through a simulated music composition session involving a human composer and generative AI.

The analysis indicates that AI excels in combinational and exploratory creativity, remixing existing styles and rapidly generating novel variations; however, it struggles with transformational creativity, which requires human imagination, cultural interpretation, and ethical sensitivity. Effective creative outcomes thus emerge from hybrid collaboration: humans provide crealectic framing, including imagination, intentionality, and ethical judgment, while AI enhances ideational breadth and accelerates iteration.

This study suggests creativity is best understood as an emergent property of human–AI assemblages rather than an attribute of isolated individuals. Generative AI, acting as a mediating rather than merely intermediary actor, transforms creative intentions into novel outcomes. However, integrating AI into creative practices raises critical ethical questions concerning authorship, attribution, and responsibility. The thesis proposes that navigating these issues requires adopting posthuman ethical frameworks that acknowledge distributed agency while ensuring human accountability.

PREFACE

This thesis began with a moment of irritation in the classroom. During a discussion, the question arose whether AI systems could be "unbiased," quickly leading to speculations about the machines' supposed intentions and even maliciousness. When I noted that biases stem primarily from data contexts and human choices rather than inherent AI qualities, the point was swiftly dismissed. It was then that I realised I wanted to write about AI in arts and culture studies with realism, nuance, and a careful sense of optimism.

My frustration was never about the legitimate critiques AI deserves, but about how the conversation continually missed more interesting issues. We were anthropomorphising AI, attributing it with agency or malice, instead of examining questions of authorship, collaboration, and what creativity truly means when humans eventually start using this technology. The discourse often seemed stuck between techno-utopian enthusiasm and dystopian fear, leaving little room for the reality I experienced in my creative practice.

My stance towards AI is neither celebratory nor entirely sceptical; I aim to be pragmatic. I believe in thoughtfully selecting the right tool for a given task, always keeping creative control and critical judgment human-centred. Working closely with generative AI in artistic and academic contexts has proven fascinating. I even mentioned to my supervisor that I had never had this much fun writing a scholarly work before. At the same time, this project has made me increasingly reflective about when and how these tools should be integrated, as well as how to communicate their involvement to others.

Indeed, the thesis itself became a practical exploration of distributed creativity. I collaborated with Claude, ChatGPT-4o (especially its voice mode), and DALL·E 3 throughout the process. I tried to have these AI tools function as intellectual partners, facilitating iterative reflection, rather than serving as writing bots. Nevertheless, I was always mindful of preserving scholarly integrity and ensuring human oversight remained central.

At times, I felt tempted to downplay this collaboration, aware that openly acknowledging AI involvement remains controversial in many academic contexts. Ironically, studying transparent AI co-creation made me more aware of the cultural sensitivities surrounding the open adoption of such methods. Yet this tension itself proved helpful too, reinforcing precisely why we need critical, honest discourse about human–AI creative partnerships.

Ultimately, my intention with this thesis has been to approach generative AI as an opportunity. Rather than dismissing or uncritically celebrating AI, I aim to demonstrate that serious cultural scholarship requires engagement that is reflective, transparent, and nuanced. That is what I have sought to offer here.

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Special thanks go to my cousin Amber for creating the cover artwork, skilfully adapting an initial concept developed collaboratively with DALL·E. Her willingness to engage thoughtfully with hybrid human-AI artistic processes embodies the collaborative spirit of this research, and I greatly appreciate her contribution.

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INTRODUCTION

Generative artificial intelligence (AI) systems have rapidly evolved into major cultural forces, producing original texts, images, music, and other creative outputs that increasingly shape the cultural landscape. In public discourse, AI is frequently positioned as an adversary to creativity, threatening employment, mimicking artistic expression, and destabilising traditional concepts of authorship. While I find such anxieties are understandable, they often reduce complex dynamics to binary oppositions: human versus machine, authentic creator versus mechanical imitator. These framings risk obscuring more productive questions about AI's role in creative processes.

Recent scholarship suggests that the issue may stem from the way these questions are framed. Shen and Zhang, for instance, describe AI's "promotional effect," where new roles and capacities emerge rather than being displaced (2). Research from MIT Sloan similarly highlights AI's potential to augment specifically human strengths such as empathy, judgment, and creativity (Rigobon and Loaiza). In contrast, the University of Amsterdam has predicted that AI may perform two-thirds of existing jobs by 2030, necessitating significant adaptation across sectors (Volberda). These very contrasting visions underscore a deeper point: for understanding AI's cultural impact, an examination is needed of how it reshapes all the systems through which creativity takes form.

This thesis takes up that challenge. Rather than asking whether AI will replace human creativity, I examine how it already contributes to creative work. What changes when creativity is no longer assumed to reside solely within the individual human mind, but is instead understood as emerging from dynamic interactions between people, tools, environments, and ideas? What new forms of imagination and collaboration become possible when humans and machines create together?

To explore these questions, I propose understanding generative AI as a crealectic actant. Although initially unfamiliar, this term brings together two

significant philosophical traditions that offer valuable insights into the evolving nature of creativity.

The first draws on philosopher Luis de Miranda's concept of the Creal: a fusion of "created" and "real" that describes the ongoing process through which new realities come into being. De Miranda presents creativity as a way of navigating emergent possibilities. Crealectics, his associated philosophical method, moves beyond traditional dialectics by emphasising aspiration, imagination, and the ethical challenge of bringing new worlds into being (602–04).

The second tradition builds on Bruno Latour's actor-network theory, particularly his notion of the actant. For Latour, an actant is anything that produces a difference within a system—human or nonhuman, material or immaterial. Agency becomes a matter of relational effect rather than internal intention: if something alters the trajectory of events, it acts (71). This framework distributes creative agency across networks and assemblages, recognising how tools, platforms, algorithms, and datasets play an active role in shaping creative outcomes.

By framing generative AI as a crealectic actant, this thesis argues that such systems do more than execute instructions. They participate in shaping what can be created, perceived, and imagined. This participation does not depend on one's level of consciousness. It emerges through AI's capacity to transform creative processes, expand the range of available expressions, and reshape the meaning of creativity itself.

The central research question is, how does generative AI challenge human-centred creativity and enable new forms of collaborative agency?

Three sub-questions guide the inquiry:

- How can crealectic philosophy and distributed creativity theories help us evaluate human–AI creative collaborations?
- What hybrid creative practices are emerging from human–AI interactions?
- How does AI's scalability affect cultural understandings of originality, authorship, and creative value?

This qualitative, exploratory study employs speculative design methods to examine these questions. By theorising generative AI as a crealectic actant embedded within creative assemblages, the thesis proposes new conceptual frameworks for understanding and shaping the future of human–machine collaboration.

APPROACH

This thesis integrates several theoretical perspectives that offer complementary insights into human–AI creative collaboration. Theories of distributed creativity (Sawyer; Glăveanu) demonstrate how creative processes unfold across social and material networks, rather than within isolated minds. Actor-network theory (Latour) highlights the agency of nonhuman elements—such as tools, platforms, and algorithms—arguing that these entities actively shape outcomes rather than merely serving human purposes. Posthuman ethics challenges assumptions of human exceptionalism in creativity, while speculative design offers a means of exploring possible futures rather than simply documenting current practices.

Methodologically, the thesis employs speculative design techniques such as critical uncertainties, adapted from Pierre Wack's scenario planning methods, and design fiction, pioneered by Bruce Sterling and further formalised by Julian Bleecker. These approaches enable a structured exploration of plausible future trajectories for human–AI collaboration while remaining grounded in existing technological developments. By anchoring speculation in real-world

platforms and creative workflows, the analysis maintains relevance to current and emerging practices.

Understanding AI's role in creative processes requires more than a technical or functional analysis. As generative systems become embedded in creative work, fundamental questions emerge: How might we continue to value human imagination while acknowledging AI's contributions? What would a responsible creative system look like, one that supports new forms of authorship without undermining human agency?

By conceptualising generative AI as a crealectic actant, this research offers new frameworks for addressing such questions. It examines how AI not only modifies the tools of creative production but also reshapes the very meaning of creativity in human–machine partnerships. The following literature review establishes the theoretical foundation for this investigation, drawing together distributed creativity, actor-network theory, crealectic philosophy, and posthuman ethics to illuminate AI's role in transforming creative practice.

LITERATURE REVIEW

Is creativity exclusively human, or can machines genuinely participate as co-creators? Once firmly resolved in favour of human exceptionalism, this question now requires re-examination. Historically, creativity has been seen as the realm of individual genius and intentional artistry (Glăveanu 2–3; Palanski). However, contemporary theories suggest a shift: creativity emerges not from isolated minds but through distributed, material, and social networks (Atkinson and Barker 1056).

Vlad Petre Glăveanu has been especially influential in advancing this distributed perspective. In *Distributed Creativity*, he frames creativity as a "distributed, dynamic, socio-cultural, and developmental phenomenon" (2). Rather than treating creativity as an innate personal trait, Glăveanu emphasises relationality—how creative processes emerge through interactions between individuals, artefacts, traditions, tools, and environments. He critiques the "lone genius" model by proposing a transition from the I-paradigm (individual potential) to the He-paradigm (heroic genius), and ultimately toward a We-paradigm, in which creativity is collective, contextual, and participatory (7). This reconceptualisation is foundational for considering AI as a creative participant or actant (Tureta 5; Atkinson and Barker 1056).

Glăveanu illustrates this through Romanian folk egg decoration, where each artisan's unique contribution remains embedded within collective traditions. As he writes, "The work of decoration brings eye and hand together… but more than this, it reunites the individual creator with the eyes and hands of others" (4). Creativity here arises through "cumulative variation," a dialogue between personal expression and shared heritage (4–5). Materials and tools not only support creativity but also shape it. This reflects actor-network theory's insight that nonhuman entities influence creative outcomes.

Keith Sawyer and Stacy DeZutter further support this view with empirical research on youth improvisational theatre. Their work identifies "collaborative emergence," where creative meaning develops in real time through mutual responsiveness, retrospective reinterpretation, and unpredictable exchange

(83–84). Individual contributions only gain meaning through others' responses, suggesting that creativity is inherently an interactive process. This is crucial for understanding human–AI dynamics, where creative outcomes arise from the iterative interaction between prompts, system outputs, and human recontextualisation.

Sawyer and DeZutter draw on Edwin Hutchins' distributed cognition theory, which posits that cognition is not limited to internal processing alone, but is extended across social groups, artefacts, and environments (qtd. in Sawyer and DeZutter 83). Hutchins' study of ship navigation demonstrated that complex thinking is accomplished through collaborative human–tool interaction (85). This supports the view of human–AI systems as unified creative ensembles. While Glăveanu maintains that "the mind is still a locus of creativity," he insists it functions through symbolic systems and cultural mediation, never in isolation (9).

Although early distributed theories often stopped short of granting agency to tools, generative AI complicates this stance by autonomously producing novel outputs. Tureta argues for seeing such configurations as "hybrid creative systems," where human–AI co-creation reflects neither full automation nor full human authorship (4). Artists using generative systems increasingly describe their process as co-constructed, with AI offering direction-changing surprises, reinterpretations, and aesthetic suggestions. In this view, creativity does not originate from either side alone, but rather emerges from their interplay. Management research further confirms that innovative outcomes in creative industries increasingly depend on human and machine inputs working in tandem (Tureta 8).

This approach aligns with Mihaly Csikszentmihalyi's systems model of creativity, in which new ideas arise through interactions between a domain (symbolic knowledge), a field (evaluators or gatekeepers), and a person (who introduces variation). Atkinson and Barker argue that generative AI reconfigures each element: expanding domains with new stylistic possibilities,

functioning as both contributor and filter, and distributing the evaluative process (1056–57).

Actor-network theory complements this distributed view by introducing the concept of the actant: any entity that makes a difference within a system. According to Bruno Latour, agency is defined not by intention but by effect. If something alters the flow of events, it acts (71). This framework extends agency to nonhuman actors such as datasets, algorithms, platforms, or even prompts. In creative contexts, such elements can shift decisions, limit or expand options, or trigger aesthetic outcomes. Creativity is thereby understood as a process enacted through networks of human and nonhuman actors, rather than as the result of an individual genius.

Luis de Miranda's concept of crealectic intelligence adds a critical philosophical layer. For de Miranda, creativity involves both production and navigating what is possible. It emerges through interaction between the real, the made, and the imaginable, driven by what he calls a "sense of desire and awe" (602–06). This crealectic perspective allows us to acknowledge AI's productive capacity without equating it with human imagination. Generative systems may generate variation, but de Miranda argues that work that meaningfully reconfigures values or opens ethical possibilities still hinges on human insight. Creative acts then shape the artefacts and how we make sense of the world (603–04).

This resonates with posthumanist thinkers such as Joanna Zylinska, who challenge human–machine binaries by recognising that creativity has always involved entanglements between the biological and the technological. She describes authorship as "multispecies and nonhuman," distributed across assemblages (16). Posthumanism shifts the question from whether machines can be creative in the human sense to how creativity itself must be redefined when more-than-human actors participate. Enactivist and distributed cognition frameworks reinforce this reframing, seeing creative processes as situated, embodied, and extended through the tools and environments in which they unfold.

These theoretical positions meet current practice in hybrid human–AI workflows. Platforms such as Adobe Firefly exemplify collaborative design, while design studios, open-source communities, and creative coders demonstrate how AI contributes to ideation, iteration, and aesthetic filtering. Simultaneously, industry imaginaries play a formative role. Schulz and Schröter's concept of the techno-imaginary, drawing on Castoriadis' radical imaginary, highlights how technological visions oscillate between consolidating meaning and enabling disruptive potential (Castoriadis 369–74; Schulz and Schröter 9–10). The use of generative AI is never neutral; it reflects prevailing cultural imaginaries about creativity and automation.

Finally, speculative design emerges as a valuable methodological approach for exploring these shifts. Adapted from futures studies and design fiction, it enables rigorous engagement with possible creative futures before they become entrenched realities. Rather than treating speculative narratives as fiction, this thesis utilises them to explore the ethical, cultural, and epistemic implications of human–AI collaboration. In doing so, it contributes to a more generative discourse around machine creativity. One that neither romanticises nor demonises AI but situates it within the evolving assemblages of twenty-first-century creative practice.

NONHUMAN ACTANTS AND AGENCY

If creativity is distributed across networks, how do we define its participants? Actor-network theory (ANT) provides a compelling explanation. Bruno Latour introduces the concept of the "actant" to avoid anthropocentric assumptions: any entity that affects outcomes qualifies as such, regardless of whether it is human (71). This is not a form of anthropomorphism but a move toward analytical precision. Latour urges researchers to "follow the actors," whether human or nonhuman, to understand how phenomena emerge (12–13).

For human–AI creativity, ANT offers a critical foundation. Latour argues that "the social" is not a stable domain but a fluid network of reassembling associations (7). When applied to creativity, this perspective reveals that outputs do not originate from isolated individuals but from complex networks that link people, technologies, ideas, and institutions.

In *Reassembling the Social*, Latour defines an actor as anything that "does things, has effects, designs others, or resists being designed" (72). Notably, this definition avoids intentionality. When generative AI transforms textual prompts into unpredictable outputs, it "does things" and "has effects"—sometimes even resisting the user's expectations. By ANT's criteria, such systems qualify as actants (Tureta 4). Yet actants never operate in isolation. An AI image generator, for instance, operates within a complex web of engineers, training datasets, platform interfaces, infrastructures, and sociocultural norms, collectively forming a creative assemblage (Tureta 5, 8).

ANT's principle of "symmetry" is especially valuable here. Latour advocates for a flat ontology in which no actor is automatically prioritised (72; Tureta 6). Instead of presuming that humans create while AI assists, ANT encourages empirical examination of each actor's distinct contributions. Perhaps the human provides aesthetic framing, while the AI offers generative variation; the result is then the emergent product of their interplay.

Comparison Axis	Intermediary	Mediator
Definition	Passively transfers input to output.	Actively transforms inputs and shapes outcomes.
Role in Networks	Stable link in a chain.	Dynamic node that alters network pathways.
Agency	No agency of its own.	Contributes meaningfully to network activity.
Example in Context	A Photoshop filter applying a predefined aesthetic.	A generative model interpreting prompts and producing unexpected outputs.
ANT Implication	Does not alter creative agency.	Must be considered an actant influencing creative processes.

Table 1 – Intermediary and Mediator Comparison Axis in relation to AI.

ANT resists attributing outcomes to vague abstractions like "society" or "technology." Instead, it demands close empirical mapping of the networked interactions that produce effects (Latour 25, 33). In AI-mediated creative work, this involves tracking the interactions between artists, algorithms, datasets, and feedback loops. For example, an AI's biases may originate from its training data, yet these biases only manifest through specific prompts and contexts. The creative outcome is thus not attributable to a single entity but to the relational dynamics of the network. This aligns very well with Zylinska's notion of "entangled agency," which stresses that human and technological actors co-constitute outcomes (4, 13).

Latour's well-known example of the door-closer is instructive. The device "acts" by ensuring the door stays shut, performing human labour by mechanical means (72). Similarly, AI "acts" by generating sketches, prototypes, or musical fragments. The more pressing question becomes: how does AI reshape the creative process? Does it accelerate production, diversify stylistic options, or embed ideological patterns? ANT frames these as effects not of "AI" in the abstract, but of specific actants situated within broader assemblages.

Luis de Miranda develops this perspective further in his notion of "anthrobotic authorship", creative processes situated within an "anthrobotic horizon" of interdependent human–AI relations (597). He dismisses the myth of AI autonomy, emphasising that creative systems are deeply entangled with human intention, desire, and contextual framing. In practice, many organisations now treat AI as part of the creative team. However, recognising AI as an actant also raises ethical concerns. Does it risk obscuring human responsibility?

Latour is clear on this point. ANT does not attribute consciousness or moral accountability to nonhumans. Rather, it recognises that nonhuman actors produce effects that must be considered (72–73). Orlikowski and Scott expand on this by describing sociomaterial agency as a "reconfiguration of the world" arising from "constitutive entanglement," in which technologies become "equivalent participants" in organisational and creative practices (455, 457).

ANT thus reframes creativity as a relational outcome, a product of interactions among humans, tools, ideas, and environments. This formalises insights from distributed creativity theories and provides a vocabulary for addressing new ethical, epistemic, and ontological challenges posed by AI co-creation.

Crealectic Intelligence and the Limits of Machine Creativity

While distributed creativity and actor-network theory expand our understanding of creative networks, Luis de Miranda draws attention to a critical dimension that is often overlooked: the qualitative and experiential depth of creativity. In his essay "Artificial Intelligence and Philosophical Creativity," de Miranda distinguishes between three forms of intelligence—analytic, dialectic, and crealectic—and argues that genuine creativity depends on distinctly human capacities to which artificial systems lack access (605).

De Miranda's argument resonates with Cornelius Castoriadis' concept of the radical imaginary, the ontological force through which societies generate meaning and transform their institutions. For Castoriadis, the radical imaginary

"precedes the symbolic and is therefore fundamentally indeterminate," allowing for the "perpetuation of otherness", moments when instituting energies rupture established norms to bring about unprecedented symbolic worlds (qtd. in Schulz and Schröter 20). Within human–AI collaboration, this implies that the most powerful creative gestures emerge from the invention of meaning beyond either party's isolated capabilities.

De Miranda critiques analytic intelligence, AI's epistemological foundation, as reductionist. It decomposes complexity into discrete parts and processes them through computational logic. Although powerful for classification and pattern replication, analytic intelligence fails to grasp the ambiguity, nuance, and existential weight of lived experience. As he states, "neither analytics nor dialectics exhaust the Real" (605). Dialectic intelligence, though more flexible, risks entrapment in endless cycles of synthesis. By contrast, crealectic intelligence is defined by its imaginative force, its ethical aspiration, and its sensitivity to latent potential (603). At its heart are affective states such as awe, longing, and the sublime, qualities inseparable from the creative act itself: "A non-biological AI cannot emulate crealectic intelligence because it is grounded in desire and felt sublimity" (602).

Margaret Boden's taxonomy of computational creativity offers a valuable counterpoint. She identifies three modes: combinational (reconfiguring known elements), exploratory (navigating rule-bound conceptual spaces), and transformational creativity (modifying or redefining those rules) (5–7). Yet her framework remains primarily structural and mechanistic, sidestepping the affective and existential registers that de Miranda deems essential.

Comparison Axis	Boden's Computational Creativity	De Miranda's Crealectic Intelligence
Definition of Creativity	Creativity as a process of generating novelty within or by altering rule-based conceptual spaces.	Creativity is an imaginative and aspirational force driven by the felt sense of potential and ontological openness.
Creative Process Orientation	Systematic, symbolic, rule-based exploration or recombination.	Dialectical, intuitive, affective development of new value through synthesis.
Types of Novelty	Combinational (remixing), exploratory (navigating), and transformational (changing rules).	Crealectic (generating new existential possibilities not logically derivable from existing structures).
Driving Force	Logic, computation, and formal systems.	Emotion, imagination, desire, and sublimity.
Epistemological Basis	Symbolic AI and computational models of the mind.	Phenomenology, vitalism, and process philosophy.
Limits of Agency	No intentionality or consciousness, acts as an abstract system.	Grounded in human consciousness, affect, and ethical reasoning.
Temporal Dimension	Fast, iterative, and often goal-directed or generative within fixed timescales.	Slow, reflective, embracing incubation and existential waiting (crealectic time).
Ethical & Existential Depth	Creativity is output-focused; it lacks intrinsic concern for meaning or context.	Creativity as a meaning-making act entangled with ethical responsibility and future-orientated aspiration.

Table 2 – Comparing Boden and De Miranda's Views on Creativity.

Boden's analysis illuminates critical limitations: while computers excel at recombination and rule navigation, they struggle with transformational creativity that requires shifting the logic of the system itself. Even where advanced models mutate patterns unpredictably, their outputs often lack aesthetic cohesion or developmental direction. Without sustained attention or a felt commitment, AI systems produce novelty without necessity, as Boden herself notes, generating results without knowing why they matter (319–20).

A related concern is the temporal structure of creativity. Human creative practice often involves incubation, interruption, and re-evaluation, an uneven temporality that is out of step with the high-speed iterations of AI systems. De Miranda's concept of "crealectic time" thus proposes an alternating rhythm: human reflection woven through AI's computational acceleration, not replaced by it.

This analysis suggests that AI's role in creative systems is best conceived as complementary. De Miranda imagines "crealectic co-creation," in which human and machine capabilities align symbiotically. Here, AI offers generative breadth, while the human contributor provides imaginative direction and ethical anchoring (606). This vision resonates with Wilson and Daugherty's account of "collaborative intelligence," where human strengths are amplified—not displaced—through AI partnership (4).

Ultimately, de Miranda, drawing on the philosophies of Bergson and Whitehead, insists that creativity must not be reduced to optimisation. The challenge is to cultivate systems that honour the ontological weight, ethical tension, and aspirational scope of creativity. More-than-human creativity, in this view, requires both technological innovation and critical frameworks that can preserve human significance within collaborative futures.

DECENTERING THE HUMAN

While crealectic theory foregrounds the imaginative and ethical depth of human creativity, posthumanist perspectives open space for reconsidering creativity as something that may emerge beyond the human alone. Rather than framing creativity as an internal property of individual minds, posthumanism encourages a view of agency as relational, arising through interactions among humans, machines, materials, and environments. From this standpoint, the human–nonhuman binary becomes less stable, inviting reflection on how value, authorship, and responsibility are negotiated within increasingly hybrid creative networks.

Joanna Zylinska's *Nonhuman Photography* provides an illustrative case. Although focused on visual media, her claims extend to creativity more generally. She demonstrates how cameras, drones, satellites, and other technologies routinely generate visual content independent of human intervention. These outputs are shaped by algorithmic logics, environmental conditions, and technical constraints—what she terms "nonhuman vision" (3). Rather than seeing such tools as passive instruments, Zylinska situates them within what she calls distributed authorship, a concept that describes creativity arising from entangled human–machine processes (14–16).

This insight builds on Donna Haraway's critique of the "God trick"—the illusion of universal, neutral perspective (*"*Situated Knowledges*"* 589). Both Haraway and Zylinska argue that all seeing, and by extension all making, is situated. Contemporary creative practices increasingly involve machines that perceive in ways humans cannot, such as through thermal imaging, pattern recognition, and data-driven inference. When generative systems remix, reinterpret, and respond to inputs, they extend human perception and influence the creative process. From this view, recognising AI as a co-author becomes less a provocation and more an analytical necessity.

However, posthumanism does not dispense with human responsibility. On the contrary, it demands an expanded ethical framework that acknowledges interdependence. Zylinska's notion of a "zoetic ontology" repositions creativity as a living process embedded within material, temporal, and ecological contexts (165). Rather than asserting control, humans become curators within multispecies and machinic collaborations. This reframing has direct implications for how we think about AI ethics: it calls for scrutiny of training data, consideration of power structures encoded into algorithms, and recognition that outputs are the result of layered, distributed agencies (20–24).

Haraway's proposal to "make kin" with nonhumans provides an ethical orientation here. While current AI systems remain far from sentient collaborators, this metaphor reminds us that creative partnerships need not be grounded in equivalence to warrant ethical consideration. It gestures toward a

design philosophy that fosters reciprocity, care, and humility in our engagements with nonhuman actors (*Staying with the Trouble* 103, 130, 138).

This relational ethics is reinforced by sociomaterial perspectives such as those of Wanda Orlikowski and Susan Scott. They argue that the social and the technical are co-constituted; even seemingly neutral tools, such as search engines, encode cultural assumptions and institutional norms (456, 465). Generative AI systems, trained on large-scale datasets, often amplify dominant ideologies or marginalise minority perspectives. Thus, posthuman creativity is never value-neutral. It bears the imprint of its infrastructure, requiring critical reflection on whose creativity is enabled and whose is constrained.

Accountability becomes more complex in this distributed framework. Traditional legal models locate responsibility with identifiable human agents—developers, users, or institutions. However, as systems become more autonomous and opaquer, attributing authorship or blame becomes increasingly complex. Orlikowski and Scott advocate transparency about human–machine entanglements, arguing that tracing these connections is essential for informed ethical judgement (467).

Zylinska proposes an "ethic of minimal violence" in response. Rather than celebrating AI for its novelty or productivity alone, she urges designers and users to consider its societal consequences: whether it reinforces exclusion, displaces labour, or normalises harmful representations (43). Creativity, in this light, becomes an arena for negotiating inclusion, justice, and ecological concern, not merely producing outputs.

Posthumanism, then, does not deny human creativity but also situates it within broader assemblages of action. It demands that we rethink authorship, value, and agency without surrendering the imperative for ethical responsibility. Generative AI presents both a challenge and an opportunity in this regard: to design systems that extend creative practice while remaining mindful of the complexities of shared agency.

CREATIVES AT THE ANTHROBOTIC HORIZON

The rise of generative AI in creative domains has prompted a complex range of responses from designers, musicians, writers, and visual artists. How creatives interpret and integrate AI not only reshapes their practices but also signals broader shifts in the future of creative labour. Daniel Ashton identifies three dominant "risk imaginaries" that characterise how UK policy discourse frames AI's role in creative work: safe haven, complementary, and replacement (97).

Imaginary	Core Premise	Implication for Human Creatives	Outcome
Safe Haven	Human creativity is irreplaceable.	Creatives are insulated from AI disruption.	Focus on emotional, intuitive, or affective labour.
Complementary	AI assists rather than replaces.	Humans gain time for high-level creative ideation.	Generative AI platforms functioning as co-pilots.
Replacement	AI will automate parts of or entire creative roles.	Human roles may be reduced, especially entry-level tasks.	AI-generated stock imagery is displacing commercial photographers.

Table 3 – Ashton's AI Risk Imaginaries

The "safe haven" narrative posits that human creativity possesses unique attributes—such as imagination, intuition, and emotional depth—that shield it from automation (Ashton 98). This resonates with de Miranda's view that creativity entails desire, awe, and meaning-making irreducible to computation (602). Many creatives, particularly those working in conceptual or affective modes, find reassurance in this framing.

The "complementary" imaginary casts AI as a productive partner. Under this view, creatives retain strategic and aesthetic control, while AI supports execution. Adobe Firefly exemplifies this co-pilot model, generating images

from text prompts, performing seamless generative edits, and even animating static content. Adobe explicitly positions Firefly as handling mechanical tasks while the creative retains authorship (Filimowicz).

Tureta's field research confirms that many creatives now approach AI as a team member: "fully integrated into the full marketing strategy and the creative mix" (10). Practitioners report expanded possibility spaces and time-saving benefits. Yet Ashton cautions that such imaginaries often overstate current capabilities (99). While platforms like DALL·E, Suno, or Udio proliferate, their actual augmentation of creative workflows remains a contested issue.

The "replacement" imaginary evokes the quiet erosion of human roles. Terms like "efficiency" and "disruption" mask structural displacements, particularly of early-career creatives. Ashton warns that automating entry-level roles undermines the apprenticeship models necessary for skill development, for example (109). In practice, studios have already begun replacing junior illustrators with AI systems, prompting protests from creative communities concerned about artistic integrity and labour rights.

Real-world creative practice rarely conforms neatly to any single imaginary. One could imagine freelance illustrators utilising Firefly for concept development, but at the same time expressing anxiety about the potential for artistic devaluation. Musicians could leverage AI for prototyping while maintaining the singularity of live performance. Writers experiment with language models but assert the irreplaceability of a human voice. All three imaginaries overlap in complex ways across different roles and domains.

Ashton draws on Deleuze and Guattari's concept of "assemblage" to describe these entangled practices. A creative's assemblage might include Adobe Firefly, Discord or Reddit critique forums, aesthetic influences, software defaults, client briefs, and cultural norms. These interactions are unpredictable; AI suggestions may reshape stylistic preferences, which in turn alter the tools and networks a creative individual engages with.

This assemblage thinking reveals a key concern: aesthetic convergence. AI trained on large datasets may favour statistically dominant patterns, leading to homogenised outputs. Atkinson and Barker describe this as “domain-level influence”; AI systems can reshape entire aesthetic fields by shifting stylistic norms (1061). Without intentional intervention, creative diversity may erode under the influence of algorithmic gravity.

Ethical questions around attribution and transparency compound these challenges. While some creatives advocate clearly labelling AI-assisted work, others favour seamless integration. Getty, for example, currently prohibits the use of AI-generated images due to intellectual property concerns. In parallel, some artists label their work as “100% human-made” to signal authenticity, while others omit disclosure entirely. These practices reflect deeper tensions surrounding authorship in the anthrobotic age.

Orlikowski and Scott stress the ethical necessity of transparency in sociotechnical entanglements (450). Suggested solutions include “nutrition labels” listing training datasets, model types, and degrees of human intervention. Yet such practices remain informal and inconsistently applied, leaving individual creatives to navigate ethical grey zones without institutional support.

These tensions pose difficult questions. Will audiences develop a premium preference for human-authored work? How will copyright law adapt when AI systems train on massive corpora of existing cultural production? Can creative careers remain viable if AI automates core stages of early-career development?

AXES OF UNCERTAINTY

To examine potential futures for human–AI creativity, I employ two primary axes of uncertainty, the first concerns AI's autonomy in creative processes, ranging from strict human oversight to near-total independence. The second involves societal acceptance of AI-generated content, spanning broad public embrace to widespread scepticism (Filimowicz; Tureta 8; Zylinska 20). Together, these axes produce four distinct scenario quadrants:

Low Autonomy + Low Acceptance: Strict regulation of AI coincides with public scepticism. Creative work becomes resolutely artisanal, potentially sparking a revival of human-centred craftsmanship.

Low Autonomy + High Acceptance: AI serves as a controlled assistant. Though humans direct the output, generative tools gain broad adoption, exemplifying the "complementary" model (Ashton 98; Tureta 10).

High Autonomy + Low Acceptance: AI generates content independently, yet audiences favour human-made work. Human creativity gains premium status, akin to contemporary preferences for vinyl or handmade goods (Zylinska 143; Ashton 99).

High Autonomy + High Acceptance: AI operates with creative autonomy and public legitimacy. Human roles shift toward curatorship, direction, and ethical oversight (Filimowicz; McCraw 3).

	Low Societal Acceptance	High Societal Acceptance
Low AI Autonomy	Craft Renaissance: Human-made art gains cultural premium; AI restricted.	Co-Pilot Paradigm: AI is used as a tool; human-directed creativity dominates.
High AI Autonomy	Digital Resistance: AI is capable but undervalued; humans dominate prestige roles.	Machine Authorship: AI gains creative recognition; the human role becomes curatorial.

Table 4 – Uncertainty Quadrants

While these quadrants simplify a complex landscape, they help clarify the extremes. Design fiction can further explore these conditions through scenario-building. For instance, a high-autonomy/high-acceptance future might feature AI-dominated streaming platforms curated by humans, whereas a low-autonomy/low-acceptance setting could give rise to "authenticity movements.

Speculative design maps these possibilities and addresses urgent practical challenges. A future "Creative Commons for AI" might trace data provenance, delineate human and AI contributions, and ensure fair attribution and compensation. Co-creativity contracts could emerge, formally defining collaborative roles, ethical boundaries, and authorship rights—aligning with posthumanist ethics and sociomaterial accountability (Zylinska 141; Tureta 6).

Effective speculation is grounded in lived creative realities. De Miranda's concept of "crealectic time" could inspire a "Slow Creativity" movement, advocating minimal AI involvement in favour of reflective, experiential practice (602–604). At the same time, future workflows may support seamless human–AI collaboration, combining distributed creativity with emotional depth.

CONCLUSION

Current developments show AI is transforming creativity in ways that remain open-ended. Definitions of creativity rooted in human uniqueness are being both challenged and defended. Framing AI as a crealectic actant captures this

ambiguity: while it significantly shapes creative processes, meaningful outcomes still require human intentionality, care, and interpretation (de Miranda 602–606; Latour 72).

The literature surveyed here offers both warnings and possibilities. De Miranda warns against surrendering affective and ethical imagination to systems incapable of desire or sublimity (602). Zylinska highlights the political and epistemic risks of unexamined automation. Yet Sawyer and DeZutter show how collaboration and iteration foster innovation (83), and Latour reminds us to attend symmetrically to all creative agents, human and nonhuman alike (72).

Together, these frameworks point to futures in which human creativity may be extended rather than diminished. Distributed cognition enables creative augmentation (Hutchins; Sawyer and DeZutter 84), while posthumanist ethics insists on justice, transparency, and shared responsibility (Zylinska 16; Tureta 10). These insights not only help us interpret emerging practices but also equip us to shape them deliberately.

The next chapter operationalises these ideas through speculative design and critical uncertainty mapping. Given the contested role of AI in creative domains, an interdisciplinary and creative methodology is essential for responsibly imagining and navigating the futures ahead. This methodology provides a productive framework for addressing that challenge.

METHODOLOGY

This research employs speculative design to investigate how generative AI functions as a crealectic actant within creative assemblages. The method involves constructing and analysing plausible futures through systematic speculation. This approach is suited to a rapidly evolving field where AI capabilities outpace empirical analysis, and where cultural implications must be explored before they calcify into established norms.

THEORETICAL FOUNDATIONS

The methodological stance synthesises posthuman ontology with pragmatic constructivism. It considers AI as a participant in creative processes whose contributions are meaningful within networked systems. Generative AI alters creative trajectories through outputs that influence human decision-making, even though it lacks consciousness.

This position addresses a central conceptual tension. De Miranda reserves crealectic intelligence for beings capable of desire, awe, and sublimity—qualities grounded in human consciousness (602). How, then, can AI qualify as a crealectic actant? The resolution lies in shifting focus from individual entities to distributed assemblages. When human imagination interacts with AI's generative capabilities, the resulting assemblage can exhibit crealectic properties, even if no single component possesses them in isolation. Creativity in this context emerges from the system, rather than from its parts.

Actor-network theory supports this distributed understanding of agency. ANT's principle of generalised symmetry proves essential. It suggests that both can exert influence within socio-technical networks (Latour 76). The methodological value of ANT lies in distinguishing between intermediaries and mediators—between agents that merely transmit creative intent and those that transform it. In hybrid creative processes, this distinction helps identify where meaning and novelty genuinely emerge.

WHY SPECULATIVE DESIGN?

Three factors inform the decision to use speculative rather than empirical methods. First, the pace of AI development outstrips the speed of traditional academic research. A study begun during the GPT-3.5 era may be outdated by the time GPT-4.5's capabilities become evident. Empirical findings risk becoming obsolete before they can make a meaningful contribution to the discourse. Second, the cultural implications of generative AI in creative fields demand analysis before they become solidified through norms, platforms, and expectations. Exploring these implications while they are still in flux enables more intentional shaping of creative futures. Third, speculative methods allow for the systematic examination of variables that cannot be isolated through naturalistic observation. Thought experiments provide a structured approach to exploring what could happen, rather than just what has happened.

Following James Auger's methodological principle, the approach here strikes a balance between familiarity and provocation. Elements of current creative practice—such as prompt engineering, image generation, and AI-assisted editing—are combined with near-future developments to stretch conceptual boundaries without losing practical relevance (14). This method aligns with Dunne and Raby's notion of speculative design as "a medium for conversation" rather than a problem-solving approach. It aims to interrogate present assumptions about creativity, authorship, and human uniqueness by presenting plausible but unfamiliar futures (33).

The methodological innovation lies in applying speculative design beyond its traditional focus on artefacts. Rather than imagining speculative objects, this research constructs and examines a speculative creative relationship. These scenarios foreground collaboration, distribution of agency, and authorship dynamics across human and nonhuman participants. In doing so, speculative design becomes a tool for envisioning technologies and for rethinking the processes that define creativity itself.

IMPLEMENTATION: SYSTEMATIC SPECULATION

CONSTRUCTING THE POSSIBILITY SPACE

This research structures speculation around two intersecting axes drawn from ongoing debates. The first axis measures the degree of AI autonomy in creative processes, ranging from strict human control to near-complete independence. This range is already visible in practice, from Photoshop's manual filters to GPT-4o's capacity to generate complex outputs from minimal prompts. The second axis reflects societal acceptance of AI-generated content, ranging from broad adoption to widespread rejection. Contemporary positions span from Adobe's positioning of Firefly as a creative co-pilot to Getty Images' total ban on AI-generated submissions.

Combining these axes generates four distinct scenarios. The craft renaissance quadrant, marked by low autonomy and low acceptance, envisions a revival of artisanal value as AI use is restricted. The co-pilot paradigm, characterised by low autonomy and high acceptance, envisions AI as an assistant integrated into mainstream creative workflows. Digital resistance emerges from high autonomy coupled with low acceptance, where AI's creative power grows but remains publicly distrusted. Machine authorship, characterised by high independence and high acceptance, envisions futures where AI-generated content prevails, and humans transition to curatorial roles.

These quadrants clarify contrasting developmental paths. They are not forecasts but analytical heuristics: simplified, bounded spaces that make visible the ethical, technological, and cultural tensions embedded in human–AI creative interaction as I've discussed before.

FOCUS ON CO-PILOT

This thesis develops the co-pilot paradigm in detail while using the other quadrants as comparative points of reference. This focus reflects current empirical trends: Adobe Firefly explicitly presents itself as an assistant, as does Microsoft's Copilot platform, even by name, which aligns with Tureta's fieldwork, describing professionals integrating AI as a collaborator (10). These

platforms frame AI as support rather than substitute, aligning with broader industry narratives that emphasise human-centred creative control.

The co-pilot scenario offers optimal analytical traction. Unlike the craft renaissance or machine authorship extremes, it preserves meaningful interaction between human and artificial agents. This enables an investigation into the central themes of this thesis: distributed creativity, authorship ambiguity, and co-dependence.

Scenario development centres on music composition, chosen for its dual demands: technical precision and broad emotional resonance. These demands provide a natural division of labour between humans and machines. A simulated 2030 setting strikes a balance between plausibility and distance, enabling the exploration of near-future applications based on current trajectories without speculative detachment.

Integrated Analytical Framework

Four complementary frameworks support analysis of the co-pilot scenario. Actor-network theory maps creative assemblages by distinguishing intermediaries—those that pass along creative intent unchanged—from mediators, which transform input in unexpected ways (Latour 39). In this paradigm, generative AI functions as a mediator, rerouting creative decisions by generating unforeseen options.

Boden's taxonomy of computational creativity provides a means to classify AI's creative behaviours as combinational, exploratory, or transformational (5–7). Most generative tools operate within the first two categories, remixing known inputs or exploring variations, while transformational breakthroughs typically remain within human purview.

De Miranda's crealectic framework evaluates whether outputs reflect deeper dimensions of creativity: desire, ethical reflection, and ontological openness (602–604). Even when AI contributes materially, it is the human participant who interprets and elevates outputs toward crealectic thresholds.

Finally, Zylinska's posthuman ethics informs consideration of power, authorship, and responsibility in assemblages (16). It raises critical questions: Who shaped the training data? What counts as authorship when outputs emerge from a joint configuration? How are labour and credit distributed?

These frameworks operate in critical tension. An output categorised as combinational by Boden may gain transformative meaning through crealectic interpretation. Similarly, posthuman ethics may challenge traditional assumptions about who should be recognised as an author. This layered approach allows for both granularity and reflexivity, avoiding reductionist analyses while anchoring claims in theoretical rigour.

APPLICATION

This chapter examines the co-pilot paradigm as a lens for understanding hybrid human-AI creativity. Within this configuration, AI operates as a mediator within segmented creative workflows. It neither displaces human agency nor functions as a human-operated tool. Instead, it reshapes how intention, interpretation, and technique converge in contemporary creative practice.

This scenario reflects current trajectories in the creative industries, where AI is increasingly integrated without replacing human decision-making. It offers an ideal framework for exploring how generative systems contribute to distributed creativity while preserving distinctly human capacities. The music-based case study draws on my background in the Dutch music sector, where such collaborations are already beginning to unfold.

SCENARIO OVERVIEW

Maya, an electroacoustic composer, is developing a piece built around urban field recordings. By 2030, generative AI systems will have become an integral part of standard compositional practice. These systems, while powerful, are not autonomous creators. They require human direction, interpretation, and contextual framing. Maya's creative assemblage includes her DAW, AI composition tools, field recordings, acoustic instruments, and a network of peers. Each element, whether human or nonhuman, functions as an actant that shapes the evolving work.

IDEATION PHASE

Maya begins by uploading city recordings—crowds, engine hums, fragmented speech—alongside text prompts such as "restless, layered moments of harmony." The AI proposes sketches: a pulsing rhythmic motif echoing traffic, a smeared harmonic pad drawn from distant sirens, and an unexpected hybrid of ambulance pitch contours with ambient textures. This last output surprises Maya; it reframes a common sound as something haunting and musically compelling.

Here, the AI mediates rather than merely executes. By recombining sonic fragments in unforeseen ways, it engages in combinational creativity, introducing stimuli that Maya had not anticipated. This sparks an affective response—aesthetic curiosity with conceptual momentum.

Structuring Phase

Using the most evocative motifs, Maya outlines a three-part structure: a tense, siren-driven opening; a dissonant, high-density middle section; and a reflective close grounded in nighttime urban soundscapes. She prompts the AI to "heighten dissonance" or "smooth transitions," receiving exploratory variations in return. Some AI outputs serve routine tasks—quantising rhythms, stretching audio—while others introduce novel transitions that subtly shift Maya's structural logic.

This alternating role, between assistant and creative provocateur, embodies the co-pilot model. Maya retains authorial control, yet AI suggestions often reshape her original intentions. Within her artistic circle, this interaction is understood as extended agency: a networked process wherein aesthetic judgment remains hers, but the material provocations are shared.

Synthesis Phase

As the piece takes form, Maya transforms raw recordings—subway screeches, pedestrian noise—into expressive textures using AI processing tools. She combines AI-generated string arrangements with human-performed piano, fusing them into a layered sound. The emergent result cannot be traced back to a single author.

Here, AI remains strongest in combinational and exploratory domains but falls short in recognising emotional potential. Maya's decision to use a gritty subway brake tone, initially filtered out by the AI, as the piece's emotional climax exemplifies a crealectic act: seeing potential in the dismissed, framing it with ethical and affective intent. The machine contributes stimulus and polish; Maya instils meaning and transformative intent.

Refinement Phase

Final adjustments blend algorithmic support with human discernment. AI proposes mastering presets and simulates listener responses, flagging areas of potential overload. Maya accepts some of these suggestions but deliberately retains dissonant peaks that express her intended tension.

Refinement becomes a moment of ethical reflection. While societal norms now accept AI involvement, Maya actively discloses the tool's contributions. She also examines broader issues, including the provenance of training data, cultural representation, and credit. To counter homogenisation, she prioritises field recordings from underrepresented contexts and credits AI as part of a collaborative ecology.

Alternative Quadrant Explorations

Craft Renaissance (Low Autonomy, Low Acceptance)

In the Craft Renaissance scenario, generative AI has not disappeared but has been culturally and institutionally marginalised. Aesthetic communities, funding bodies, and audiences increasingly favour fully human-authored work. AI involvement is perceived as diminishing the authenticity, risk, and affective weight of creative expression.

In this context, Maya's studio is deliberately analogue. There are no prompt interfaces, no machine-learning assistance. Composition unfolds through tangible means: reel-to-reel recorders, modular synthesisers patched manually, notated timelines sketched by hand. Field recordings are collected through hours of attentive walking with a handheld recorder, favouring ambient chance over generative variation.

Structuring becomes iterative and slow. Maya sketches timelines on paper, then tests arrangements with live musicians. Improvisation plays a key role; serendipitous mistakes during rehearsal often shape compositional direction. Her collaborators—instrumentalists, sound engineers, mastering technicians—are all physically present, contributing their interpretations. Final mixing

occurs using analogue monitors, with balance, space, and texture sculpted by ear.

Here, creativity emerges from embodied labour, situated judgment, and deep contextual sensitivity. Distributed creativity remains, but it is entirely human in nature. This scenario foregrounds care, slowness, and resistance to automation, resonating with the notion of crealectic time, where incubation, reflection, and ethical imagination are valued over speed and novelty.

Digital Resistance (High Autonomy, Low Acceptance)

In the Digital Resistance quadrant, AI is technically powerful but culturally unsure. Maya uses advanced tools but hides them. Her AI system is local, autonomous, and capable of producing complete compositions from minimal input. Yet public discourse stigmatises AI authorship. Critics frame it as deceptive, audiences demand "human-made" guarantees, and institutions impose disclosure requirements.

Maya navigates this through secrecy. Her creative environment is hybrid: encrypted drives, air-gapped machines, anonymised file naming schemes. She might enter a phrase like "melancholy acceleration," and receive in return fully formed musical sections: dense, glitchy, and emotionally charged. But she edits heavily. She overlays acoustic recordings, alters AI-generated harmonic structures, and removes telltale sonic patterns to protect the work's human perception.

Her workflow is fast, but emotionally fraught. She iterates quickly, testing combinations of AI textures and human recordings. Sometimes she releases music under pseudonyms, when she isn't sure she has obscured the AI use proficiently. In other cases, she submits AI-assisted work anonymously to collaborative collectives. Her process resembles what Orlikowski and Scott describe as sociomaterial entanglement: a web of creative input where attribution is distributed, yet accountability remains uneven (460–61).

This scenario reflects an emerging pattern in current practice. Creators engage AI behind the scenes. They use it to break blocks, prototype ideas, or test

structural alternatives, but hide this involvement due to fear of audience backlash or institutional devaluation. Ashton's replacement imaginary casts a long shadow here: many artists fear AI is a competitor, one that delegitimises labour if openly acknowledged.

Digital Resistance reveals a paradox. AI enhances creative experimentation, yet its disavowal becomes part of the creative labour itself. Maya is not just composing but also curating perception, managing disclosure, and designing around societal discomfort. Both algorithms and cultural anxiety mediate creativity.

Machine Authorship (High Autonomy, High Acceptance)

In the Machine Authorship quadrant, generative AI is fully autonomous and culturally legitimised. Creative industries, audiences, and platforms treat AI outputs as authors in their own right. Maya no longer engages in traditional composition. Instead, she acts as a curator within an expansive creative ecosystem shaped by algorithmic agencies.

Her day begins by browsing dozens of compositions autonomously generated overnight. These pieces are based on street recordings, aesthetic prompts, and filters she set earlier, now functioning as parameters rather than direct instructions. Maya does not assemble or tweak individual sound elements. Instead, she tags promising outputs, evaluates their emotional or structural integrity, and clusters them thematically.

Her workspace resembles a gallery more than a traditional studio. Tracks can be browsed, arranged into conceptual series, or released directly. Curation involves identifying aesthetic coherence, recognising emergent styles, and managing metadata. Maya occasionally uploads personal material, such as voice notes, piano fragments, or location recordings, but these serve more as inspirational seeds than as core compositional content and lack intent. AI systems integrate these traces into large-scale outputs, from which Maya selects final forms.

This shift transforms the nature of authorship. Maya no longer composes in the traditional sense; she filters, contextualises, and directs. The human role becomes infrastructural. Designing datasets, managing interfaces, and interpreting meaning, while the AI handles the material generation. Creative agency diffuses across systems and workflows.

Collaboration also changes. Maya interacts with software engineers, curatorial teams, platform editors, and data librarians rather than with instrumentalists or producers. Distribution is automated. Audience feedback loops into generation pipelines, enabling iterative recalibration of tone, genre, and novelty. Popular outputs influence these parameters for the future, threatening homogenisation.

While Maya maintains a personal aesthetic identity, it is expressed through the selection and orchestration of algorithmic possibilities. Her creative rhythm accelerates—she releases more content, explores more stylistic variation, and engages larger audiences, but with less direct contact with sound or narrative structure. The intimacy of composition gives way to the scale of curation.

This scenario realises Ashton's replacement imaginary at its logical extreme: not just entry-level creative roles, but compositional agency itself is automated (99). Yet Maya's role remains meaningful. She becomes what Zylinska might call a curator of posthuman creativity—responsible for framing the reception of each artefact, ensuring ethical sourcing, and maintaining cultural resonance (165). The question shifts from "who made this?" to "who selected, contextualised, and made it legible?"

Machine authorship challenges established norms around originality, skill, and value. As audiences become accustomed to AI-generated aesthetics, the human contribution shifts from creation to calibration. Creative practice becomes strategic and interpretive—still intentional, but reconfigured.

HYPOTHETICAL SESSION

Where the previous chapter used speculative narrative to explore the co-pilot paradigm through Maya's creative process, this chapter shifts focus to a structured simulation of human–AI collaboration. The vignette illustrated a plausible 2030 scenario grounded in lived creative practice, using narrative form to evoke how distributed agency and affective decision-making might play out in context. In contrast, the following session examines the same paradigm through a more analytical lens, breaking down the stages, tools, and interactions that define co-creative work under conditions of low AI autonomy and high societal acceptance.

Rather than offering a polished story, this simulation presents a granular, step-by-step walkthrough of a hypothetical human–AI composition session. It foregrounds specific decision points, mediations, and system behaviours, revealing how creative agency is assembled dynamically across different phases. By focusing on process rather than persona, the aim here is to model the mechanics of hybrid creativity in actionable and generalisable terms.

This session also allows for controlled comparisons with alternative quadrants, illustrating how creative dynamics shift when either autonomy or acceptance varies. It serves as both an operational map of the co-pilot configuration and a diagnostic tool for understanding how future creative workflows may evolve.

SIMULATED INTERACTION

The simulated session also takes place in Maya's studio, which is equipped with a DAW, MIDI keyboard, analogue synths, an AI co-composer interface, and an urban field recording library. The AI system is embedded within her production environment as a multimodal layer, integrated within creative tools, and receives instructions via text prompts, gestures, or sonic examples. Its responses appear as MIDI suggestions, waveform transformations, or spectral visualisations. For analytical clarity, I represent AI contributions as dialogue, serving as a placeholder for outputs that may be auditory, visual, or code-based.

Maya: "I need a short melodic fragment evoking walking alone in a neon-lit alley. Cold, reflective, but not sad. Think nighttime introspection."

AI: "Drawing from ambient minimalism and cityscape field textures. Three motif suggestions incoming."

The AI outputs three MIDI fragments: modal and arpeggiated, chromatic and angular, and pentatonic with rhythmic displacement. Maya loops the second.

Maya: "The chromatic one has that unstable weight I'm after. Reharmonise it in quartal voicings and stretch it slightly?"

This exemplifies combinational creativity, with AI drawing from learnt musical features and intervallic gestures, recombining them to fit Maya's abstract prompt. Maya acts as the initiator and curator; AI mediates by transforming semantic intention into formal material. The interaction reflects Latour's translation: AI doesn't transmit intention directly but transforms it (39).

DEVELOPMENT

Maya: "Let's take this motif and try some ambient harmonic settings. Avoid functional progressions; float, don't resolve."

AI: "Running exploratory chord mappings. Suggesting modal clusters, open fifths, and pedal-based basslines."

The AI cycles through options: sparse reverb-drenched voicings with detuned textures and tempo overlays. One version suspends all bass information, making the motif feel disembodied.

Maya: "Mmm. That second one, the detuned synth pad, is uncanny. Feels like the space itself is listening."

This demonstrates exploratory creativity, where Maya and AI probe the boundaries of potential. AI's ability to produce multiple harmonic solutions illustrates its role as an active mediator within an open-ended search space.

Unlike combinational gestures that reuse known configurations, this stage navigates possible musical futures.

Maya's reaction ("feels like the space itself is listening") reveals such a crealectic moment: sublimity where the artefact evokes more than what was technically encoded. This is affective resonance, what de Miranda describes as an imaginative event nested within existential awareness (604).

ORCHESTRATION

Maya: "Let's try a hybrid palette: processed field recordings, granular textures, maybe the motif rephrased on celesta."

AI: "Searching samples. Urban textures from the Tokyo dataset: vending machine tones, metro hum, and pedestrian signal chirps. Shall I embed rhythmic artefacts?"

Maya: "Try stretching the metro hum into a drone. Align the pedestrian chirps rhythmically to punctuate phrase endings."

The AI generates an arrangement where metro hum becomes a low, modulating pad, while chirps become percussive motifs. The motif is revoiced on celesta and doubled with granular synth.

This marks a liminal moment where exploratory becomes transformational. To reframe the sound world, a crucial component of transformational creativity, here real-world noise is transformed into musical elements, such as a drone and a percussion motif. AI proposes possibilities, but selection, combination, and contextual framing remain Maya's, consistent with the low-autonomy, high-acceptance quadrant.

In ANT terms, new actants emerge: the Tokyo dataset becomes an agent of influence; the granular synth engine becomes a mediator, shaping texture without linear control. The network becomes densely relational, and creativity is no longer traceable to a single source.

Crealectically, Maya's prompt encodes desire ("reflective, but not sad"), while her engagement with the motif reflects imagination catalysed by confrontation with an unexpected, resonant output.

EVALUATION

Maya: "Playback everything from the top. I need to feel whether it coheres."

The session plays through. After listening, Maya frowns slightly.

Maya: "The metro drone is too forward; it blurs the motif. Let's resculpt it; maybe notch out the 300 Hz range."

AI: "Applying EQ cut. Shall I compress the tails to maintain presence?"

Maya: "No, I'll handle the compression manually. It's more of a feel thing."

This moment shifts focus from generation to evaluation and inscription. Maya reasserts authorial control, choosing tactile engagement over AI-managed processing. This isn't a rejection of AI's capabilities, but a preference for embodied nuance, a return to human mediation.

Ethically, this affirms Maya's accountability within a distributed system: she accepts AI's role yet takes responsibility for aesthetic refinement. From a crealectic view, the "feel thing" marks the boundary between machinic precision and human intuition.

FEEDBACK LOOP

Maya: "I wonder if I should reference this motif later... Could it serve as a memory anchor?"

AI: "Motif recurrence can increase coherence and listener engagement. Shall I propose reprise options for later sections?"

Maya: "Maybe. For now, let's export this section and move on."

This final step suggests distributed anticipation. The interface makes suggestions based on learnt musical heuristics, shifting from reactive to proactive. The suggestion to reprise the motif implies a model of long-form coherence, hinting at future-oriented agency. This doesn't cross into full autonomy but blurs the boundary, inviting crealectic dialogue about narrative structure and memory.

In machine authorship, AI might autonomously reintroduce the motif later without prompting. In Digital Resistance, Maya might use this motif reprise but erase any trace of AI involvement. Here, however, her comfort with the tool allows reflective play: AI becomes not just a machine but a compositional interlocutor.

Creativity Coding

Ideation Phase

Prompted to generate a motif for “walking alone in a neon-lit alley,” the AI returns three musical sketches. Maya selects the chromatic one and requests reharmonization in quartal voicings.

Boden classification: Combinational – recombination of familiar musical features from training data.

Crealectic emergence: The prompt encodes affective intent; Maya’s response to the motif’s “unstable weight” signals a moment of sublimity.

Development Phase

Rejecting functional harmony, Maya guides the AI toward unresolved ambient textures. It returns detuned pads and modal clusters. One such suggestion can completely detach the motif from its harmonic context.

Boden classification: Exploratory – the AI navigates within ambient stylistic boundaries.

Crealectic emergence: Maya's comment, "feels like the space itself is listening," marks a moment of imaginative resonance, where the output evokes presence rather than function.

ORCHESTRATION PHASE

Environmental recordings from Tokyo are woven into the arrangement. The metro hum becomes a drone; pedestrian signals are reconfigured as rhythmic accents.

Boden classification: Exploratory with transformational potential – ambient sound is reframed as compositional material.

Crealectic emergence: Maya's interpretive framing of urban noise as expressive substance reflects a shift from technical input to affective composition.

EVALUATION PHASE

She refines the metro drone manually, EQ'ing out noisy frequencies the AI left behind. The decision to avoid automated compression reflects a preference for tactile, embodied control.

Boden classification: Post-generation refinement – no new content, but crucial aesthetic shaping.

Crealectic emergence: This tactile intervention signals embodied authorship, where experience and intention override algorithmic suggestion.

FEEDBACK PHASE

The AI proposes motif reprise for structural cohesion. Maya acknowledges the suggestion but chooses to delay.

Boden classification: Combinational, leaning exploratory – applying learned structural heuristics.

Crealectic emergence: The AI's anticipation invites narrative reflection. Maya's imaginative engagement with memory structure marks a relational co-authorship, even if the suggestion is not immediately put into use.

Comparative Quadrant Analysis

Craft Renaissance (Low Autonomy, Low Acceptance)

Maya sits at her desk with a stack of handwritten notes, a few open tapes, and the steady hum of an old reel-to-reel recorder in the background. There's no screen in sight. She reaches for a pencil.

Maya: "The squeaky tram brake… where was that tape again? Could work as a pivot between sections."

She threads the tape, listens back, then manually adjusts the playback speed. The result is rough around the edges, but something in the texture keeps her listening.

Maya: "It's messy, but it pulls. Maybe double it with bowed cymbal later."

She sketches a quick notation in the margin and grabs a kalimba from the shelf. There's no undo button. Each sound is created through effort and trial and error. The structure is discovered by moving things around, trying them live, adjusting microphone placements, and asking her collaborators for feedback during rehearsal.

Maya: "Let's slow that vibraphone loop in the second part, but not too much. Just enough to stretch time."

This slower pace reshapes how creative ideas unfold. There's no instant output. Each variation must be built by hand, which leads to a deeper commitment to the chosen paths. Sometimes it means missing unexpected possibilities, but other times it invites a different kind of attention: longer, quieter, more intuitive.

Digital Resistance (High Autonomy, Low Acceptance)

Maya's studio appears high-tech, but most of its equipment is disconnected from the internet. She keeps the AI system local, running on isolated computers. When she works with it, she closes the blinds and locks the door.

Maya: "Prompt: 'melancholy acceleration,' style-agnostic. Let's see what you come up with."

The AI generates three dense textures, too complex to use as is. She frowns, pulls one into her DAW, and starts isolating layers.

Maya: "This synth layer is promising. Let's blend it under something acoustic."

She records herself playing a short motif on piano, then overlays it. The idea is to obscure the AI fingerprints, to make the result appear undeniably human, even when it isn't. She keeps track of where things come from, but she'll never disclose it.

Maya: "Metadata clean. Bounce to the stem folder. Upload under 'Citrine Variants.'"

Here, the creative flow is fast and productive, but tense at the same time. Maya iterates strong ideas quickly, but her energy is divided between creating the work and making it legible to an audience that doesn't want to hear "made with AI."

Sometimes, she feels a disconnect. The moments of artistic excitement, when a sound clicks perfectly into place, are marked with a hint of hesitation. She second-guesses herself more often because of how others might judge her.

Machine Authorship (High Autonomy, High Acceptance)

Maya scrolls through the morning batch: forty-two new compositions generated overnight by a combination of AI systems she helped configure.

Most are tagged with keywords like “ambient decay,” “urban shimmer,” or “microtonal reflection.”

Maya: “Hmm. Set the filter to five-minute pieces with rising harmonic density. Let’s see what stands out.”

She listens, dragging three tracks into a shortlist folder. One, a blend of synth and field recordings from her Tokyo dataset, catches her attention.

Maya: “This one’s close. Needs more air in the middle section. Maybe swap in the streetcar layer from last month’s project?”

The AI interface suggests options automatically. She clicks to preview alternatives. No detailed editing, just adjustments to balance and framing.

Maya: “Great. Save this version as ‘Variant C.’ Add to the ‘Unquiet City’ series.”

Later that day, Maya meets with a curatorial team to discuss metadata tags, licensing rights, and scheduling. They don’t talk much about composition. Instead, they focus on coherence across the series, community feedback metrics, and the long-term tone of her catalogue.

Here, creativity is no longer about writing notes; it’s about navigating a system of possibilities. Maya still feels ownership, but it’s a different kind of ownership. She shapes trajectories, selects aesthetics, and frames meaning. Her role feels closer to editing than composing, but the emotional and ethical stakes remain the same.

ANT Mapping

In Maya's session, creativity emerges through dynamic networks of human and nonhuman actants that collectively transform and mediate outcomes. Rather than seeking singular authorial sources, ANT reveals the distributed nature of creative agency.

Actant	Description	Role
Maya (Human Composer)	Primary initiator, curator, and evaluator	Human mediator
AI Co-Composer	Generative system embedded in DAW environment	Nonhuman mediator
Urban Field Recordings	Source material influencing compositional aesthetics	Nonhuman actant
DAW	Operational environment for arranging and rendering	Intermediary
Analogue Synths/MIDI Controllers	Input devices shaping tactile engagement	Intermediary/ actant
Tokyo Dataset	Curated urban sounds (metro hums, vending tones)	Nonhuman actant
Institutional Norms	Conservatory standards and peer expectations	Sociotechnical mediator
Audience Expectations	Implied influence on coherence decisions	Social actor
AI Training Data	Historical corpus embedded in model outputs	Latent mediator
Time Constraints	Deadline pressure affecting decision-making	Temporal actant

Table 5 – ANT Mapping of the Scenario

The crucial distinction lies between intermediaries (transporting meaning unchanged) and mediators (transforming input). The AI system mediates by transforming semantic prompts into musical artefacts unpredictably. The DAW intermediates by executing operations without altering creative intention. Field recordings function as the metro hum, becoming a drone, and demonstrate mediation through recontextualisation.

Actor-Network Dynamics

The network configuration shifts dramatically across quadrants, revealing how creative agency assembles differently under varying conditions.

Craft Renaissance (Low Autonomy, Low Acceptance)

In this configuration, the network contracts to predominantly human actants and analogue tools. With generative AI, culturally marginalised, creative processes rely on embodied, co-present collaboration. Maya's studio becomes a site of physical mediation: reel-to-reel machines, modular synthesisers, acoustic instruments, and rehearsal spaces. These tools function as both intermediaries and mediators, modifying input through material constraints, serendipity, and sensory feedback. Human collaborators take on intensified roles as interpretive mediators, offering suggestions, testing structures, and shaping expression through performance.

Here, time itself operates as an actant. The slower tempo of iteration fosters deep incubation and sustained attention, allowing for transformational creativity to emerge through layered trial and revision. The feedback loop is social rather than algorithmic. Creativity unfolds not through rapid recombination but through situated, tactile engagement. Absence of AI does not equate to simplicity; instead, the network's complexity is rooted in embodied heterogeneity.

Digital Resistance (High Autonomy, Low Acceptance)

This quadrant reveals a paradoxical configuration: AI occupies a central mediating role, yet must remain hidden. Maya's workflow relies on high-

autonomy systems capable of generating large-scale materials from minimal input; however, public disclosure of AI usage carries reputational and institutional risks. As a result, the network develops around concealment technologies. Encryption software, offline hardware, and sanitised file structures become key actants, shaping the creative process as much as sound design tools.

Institutional norms and audience expectations shift from supportive to suppressive mediators. They do not frame reception but actively alter production behaviour. Maya curates AI outputs heavily, embedding them within layers of human-recorded material to obscure origin. This transforms the feedback loop: rather than collaborative input, there is strategic self-censorship. Creative agency becomes split between private innovation and public legitimacy. The network is dense but asymmetrical, with high generativity counterbalanced by high opacity.

Machine Authorship (High Autonomy, High Acceptance)

Under conditions of widespread societal and institutional acceptance, AI systems emerge as dominant mediators of human interaction. Maya's role shifts from hands-on composer to curator of generative systems. The actor-network expands beyond the studio to include platform algorithms, interface designers, dataset curators, and real-time audience feedback tools. Maya configures high-level parameters; uploads seed material and evaluates batches of AI-generated outputs. Compositional decision-making is no longer centred on individual elements but on the selection, framing, and orchestration of automated flows.

New actants enter the network: distribution platforms with integrated analytics, collaborative tagging systems, and adaptive generation pipelines. These systems actively shape what gets generated next. The creative network is infrastructural: vast, fast, and recursive. Maya's agency remains, but it is exercised at the level of system calibration, aesthetic filtering, and ethical

stewardship. Human input is displaced from note-by-note authorship but resurfaces in curatorial and conceptual dimensions.

Discussion and Theoretical Synthesis

The speculative vignette and simulated co-creation session explored throughout this chapter may be read as complementary experiments, devices to think with, rather than authoritative representations. The quadrant scenarios presented imagined configurations of sociotechnical conditions under which creative collaboration might emerge. In contrast, the simulated session attempted to make visible the kinds of dynamics that such speculative environments could entail when translated into practical settings. Taken together, they do not aim to assert truths but to surface patterns, tensions, and tendencies that inform ongoing reflection on hybrid creativity, which I will now reflect on in this chapter.

Creative Agency Across Quadrants

What becomes cautiously visible across these thought experiments is a shifting sense of creative agency. The quadrant model, by design, varied the degrees of AI autonomy and societal acceptance to test how agency might realign within these parameters. In some of the imagined dialogue, AI appeared to take a more active role in shaping outcomes; in others, human decision-making and interpretation remained foregrounded. However, the simulated session seemed to complicate any clear-cut division, suggesting that even when AI systems were positioned as generative agents, human framing, refinement, and selection remained central to the process.

This resonates with Glăveanu's "we-paradigm," which challenges individualistic accounts of creativity and instead describes it as a relational, co-constituted activity (21). The creative events described across the quadrants emerged not from a single authorial source but through distributed interactions among human intentions, technical systems, environmental inputs, and cultural expectations. In this light, some forms of hybrid creativity might be understood as emerging through configurations that could not exist without both human and nonhuman contributions (Tureta 8).

That said, the balance of contribution appeared to shift depending on context. In more stable, low-uncertainty environments, AI systems can handle a broader range of generative tasks, while human roles tend to lean more toward curation and strategic framing. In contrast, scenarios marked by sociocultural friction or low legitimacy appeared to demand greater human intervention, not simply to steer the work creatively, but to navigate questions of disclosure, authorship, and aesthetic intent.

These variations do not necessarily indicate superiority or deficiency in any single quadrant, but point toward the contextual nature of creative agency. Creativity in hybrid contexts may be less a matter of fixed roles and more a question of how different kinds of capacities are foregrounded or backgrounded, depending on the system, situation, and stakes involved. Human imagination plays a distinct role in responding to ambiguity, affective nuance, and ethical complexity, areas where current AI systems may offer limited interpretive depth.

What unfolds across these scenarios is a field of possible orientations. AI's role is not inherently additive or subtractive to human creativity, but configurative: shaping the conditions under which creativity is expressed, perceived, and evaluated. Depending on the tools, contexts, and constraints in play, certain forms of agency are made more visible, while others may become latent or distributed.

Rather than confirming fixed models of collaboration, these quadrants open interpretive space for asking: under what conditions do we want creativity to emerge? What configurations feel ethically and affectively meaningful? And how might we design future systems that support those aims, not only in technical terms, but in cultural and institutional terms?

Boden's creativity taxonomy provided a helpful starting point for considering different types of generative activity. However, considering the hybrid practices described here, their categories may benefit from further development. Combinational, exploratory, and transformational creativity each appeared across the scenarios, but rarely in pure form, and often in ways

entangled with sociomaterial, affective, and ethical dimensions not easily captured by technical taxonomies alone.

In this sense, the quadrant framework does not aim to determine outcomes, but to encourage reflection on the situated and emergent nature of creativity in an age of generative systems. It becomes a diagnostic lens that foregrounds how creative possibilities are shaped by the interplay of technical capacity, social acceptance, positional ethics, and interpretive labour.

Attribution and Authorship Dynamics

Across the various quadrant configurations, different positionalities emerged that foregrounded distinct ethical considerations surrounding authorship and attribution. The speculative vignettes suggested that in contexts of heightened AI agency, conventional ideas of authorship might begin to falter. Suppose a generative system supplies most of a creative output. In that case, it becomes increasingly unclear whether authorship should be attributed to the initiating human, the AI system itself, or the institutions and teams responsible for its design.

These ambiguities became more palpable in the simulated co-creation session. When the AI-generated motifs or textures surprised Maya and catalysed new directions, she might have encountered moments of hesitation: to what extent should these outcomes be credited to her, and when might they be more accurately described as co-productions? While she remained in control of framing and evaluation, the creative provocations themselves did not always originate from her conscious design.

Such questions appear to intensify when comparing across quadrants. In more human-centric scenarios—particularly those that resist automation—the default model of individual or collaborative authorship retained clarity. The tools served instrumental roles, and agency remained visible in human hands. In AI-centric contexts, by contrast, authorship tended to dissolve into more entangled forms.

Still, none of the scenarios proposed here offer a definitive answer to how attribution should function in such hybrid ecologies. Instead, they structure the difficulty of formalising ownership and contribution when creative agency is distributed across human, technical, and institutional actors. These speculative tensions reflect, and perhaps even anticipate, emerging legal and ethical debates within creative industries. What comes into view is a need to think critically and contextually about how we define credit, originality, and moral accountability in settings where authorship is no longer singular.

Creativity Types Across Conditions

Boden's taxonomy of creativity provided a useful heuristic for tracing how different creative modalities might emerge across the quadrant conditions. While these categories are by no means exhaustive, they offered a language for observing recurring tendencies.

In comparatively stable or constrained contexts, creative outcomes are often aligned with combinational creativity. The system's strengths in reassembling patterns from its training data made it particularly responsive to prompts that invoked known genres, styles, or aesthetic conventions. Maya's workflow regularly involved drawing on this recombinatory capacity, steering the AI through juxtapositions and then selecting outputs with the most resonance. Here, novelty tended to manifest as a fresh arrangement rather than a conceptual reorientation.

By contrast, scenarios marked by high uncertainty or radical openness appeared to resist this mode of creativity. In such settings, familiar references proved insufficient, and the creative task itself needed to be redefined. It is in these moments, especially those characterised by cultural ambiguity, ethical complexity, or emotional nuance, that transformational creativity emerges. This form of creative action, which involves shifting or reframing the parameters of a problem space, appeared to remain heavily dependent on human capacities.

This tentative distinction highlights a broader issue: while AI systems may generate artefacts that are technically new, they often do so without embedded

awareness of contextual meaning or cultural relevance. The outputs may be surprising, but whether that surprise is significant still depends on human evaluative judgment. Pattern novelty alone does not constitute transformational creativity; the ability to perceive and enact change in a system of values, signs, or relationships involves a situated awareness that current generative systems often lack.

In that sense, these quadrant explorations do not claim that humans are inherently more creative than machines. Rather, they suggest that different capacities are activated under different conditions, and that transformational creativity, as framed here, remains tethered to interpretive, ethical, and affective orientations that have been so far associated with human sensibilities. Whether and how this changes in future systems remains open to speculation.

Distributed Creativity in Practice

Within Maya's simulated session, certain moments appeared to reflect outcomes that were not clearly attributable to either human intent or machine suggestion alone. Instead, they suggested that creativity might be surfacing within the dialogic space itself, shaped by an ongoing exchange rather than isolated authorship.

This interpretation resonates with framing tools as integral components of cognitive activity. In this light, AI-generated musical sketches might be understood less as finished artefacts and more as externalised thought fragments, provocations that stimulated Maya's sense-making process through visible iteration and variation. The rhythm of exchange: prompt, output, evaluation, revision, could be seen as a temporal unfolding of creativity across agents, rather than a transfer of ideas from one to another.

Moreover, the creative assemblage at work seemed to extend beyond the immediate human-AI interaction. Elements such as the urban field recordings, cultural memory encoded in training data, and Maya's situated aesthetic knowledge all contributed to shaping the trajectory of the composition. These interactions might be read as forming a temporary creative ecology, an

assemblage in which meaning and form emerged through the interplay of diverse influences.

It is also plausible that the configuration of this assemblage varied across levels of sociotechnical uncertainty. In lower-uncertainty scenarios, where tools were accepted and outputs remained legible, interactions appeared to stabilise into more defined roles: the AI as pattern generator, the human as selector and framer. Conversely, in high-uncertainty conditions, roles seemed to shift more fluidly. Here, agency became less easily locatable, with creativity distributed across unpredictable constellations of environmental cues, data sources, technical systems, and human judgment.

Taken together, these speculative dynamics invite a reframing of creativity as a situated process enacted across shifting networks. This reframing does not resolve the tensions surrounding agency or authorship, but it does suggest that the locus of creativity might be less fixed and more contingent upon how systems, tools, and human actors come into relation at particular moments.

Reflecting on Shared Creativity

Looking back across the quadrants and the simulated co-creation session, one recurring theme seems to have emerged: creativity did not originate from a single source. What felt "creative" emerged somewhere between Maya's interventions, the AI's generative suggestions, the studio's tools, and the broader contexts framing the task. Tracing the origin of an idea often felt less important than observing how it became something meaningful.

Moments that stood out—like Maya's recognition of the metro hum or her insistence on EQ'ing by hand—were responses to a broader ecology of signals, pressures, memories, and tools. These decisions weren't about rejecting AI involvement, but about interpreting and reframing it; about deciding when something was "enough" or when it needed more friction, more affect, more care.

In hindsight, it became clear that the creative breakthroughs aren't purely human nor purely machinic. Even today, these breakthroughs are co-shaped. Set in motion by one actor, redirected by another, filtered through environments and expectations. If there was agency in the scenario, it was shared but not evenly. Maya's role often involved intervening at the right moment: to say, "not this, but maybe that," to notice what the system couldn't perceive.

This felt most evident when things stalled. In high-autonomy quadrants, AI could keep generating endlessly, but novelty without purpose quickly became noise. Conversely, when Maya worked without AI support, the weight of invention sat heavily. What helped wasn't the volume of ideas, but the presence of another mode of thinking, one that moved faster, differently, offering sparks she could react to.

If these experiments suggest anything, it's that creativity might be less about individual talent and more about configuring relationships: between person and machine, between tool and intuition, between structure and disruption. The best results didn't come from control or surrender, but from a shifting rhythm of listening, prompting, correcting, and imagining.

Reflecting on the Interaction Dynamics Through Uncertainty

The simulated session can be read as a possibility space for observing how interaction patterns between humans and generative systems might shift depending on uncertainty levels. In more structured moments—such as Maya's initial prompt for a motif or her adjustments to harmonic framing—the interaction tended toward a hierarchical configuration. It resembled scenarios where human intention steers the process and AI functions as a responsive generator. This echoes what might occur in low-uncertainty creative contexts, where expectations are relatively stable and interaction loops are short and directed.

Yet some parts of the session seemed to lean toward a different kind of dynamic. When Maya ventured into open-ended conceptual territory, asking for sounds to "float" or drawing on ambiguous urban textures, the exchange took on a more improvisational rhythm. AI responses occasionally shifted the direction of the piece, not intentionally, but by reframing the space Maya was working within. These speculative moments invite reflection on a model of shared emergence, where agency isn't assigned beforehand but is continuously redistributed as the composition unfolds. In such settings, the possibility arises that creativity itself becomes an emergent property of the exchange.

Emerging Motivational Clues

The session also suggests that motivation in human–AI co-creation may fluctuate depending on how agency is configured. Maya appeared most engaged when encountering outputs that neither confirmed nor contradicted her prompts too directly; responses that recontextualised her intent rather than simply fulfilling it. Her reaction to the uncanny synth pad implied a shift from instrumental use to affective response, a threshold where output moved from functional to evocative.

One might speculate that such moments signal a future in which AI serves more as a catalyst for inspiration than as an agent of execution. Yet when the system began to exceed its intended role, offering compositional choices that veered beyond Maya's vision, she quickly reasserted control. This push and pull gestures toward a broader tension in creative futures: how to harness AI's generative momentum and emotional resonance without relinquishing too much narrative or aesthetic authorship.

Expanding the Assemblage Frame

The session speculated on how creative assemblages might operate in hybrid future environments. The AI system, of course, played a visible role. But less immediately apparent actants—datasets, institutional expectations, prior aesthetic experience—also appeared to exert influence. Maya's hesitation about the motif reprise, for example, may suggest an imagined audience whose

preferences shaped her compositional decisions. The Tokyo field recordings, drawn from an archive, introduced cultural referents that shaped atmosphere and timbre. These, too, could be seen as part of the creative ecology.

Rather than seeing creativity as the result of a single act or input, the session invites consideration of futures where creativity is enacted across assemblages, where affective, temporal, technical, and cultural forces co-compose. The simulation didn't prove this model, but it gestured toward it, suggesting that in hybrid creativity, the meaningful work might lie in what tools produce and in how humans choose to interpret, resist, and reorient those offerings.

Emergent Roles in Varying Creative Conditions

Across all quadrant scenarios, creativity appeared as the outcome of relational configurations. Yet the roles assumed by each participant in this assemblage seemed to shift notably depending on the level of uncertainty and technological autonomy within each setting.

In low-uncertainty contexts, creative roles tended to settle into stable patterns. Maya often functioned as a guiding orchestrator—offering prompts, curating responses, and steering the direction—while the AI served as a responsive generator of options. This rhythm produced relatively linear workflows, marked by clear human intention and rapid iteration. Yet even within this apparent hierarchy, traces of co-agency surfaced. Several of Maya's decisions were shaped by options the AI had surfaced earlier, suggesting that influence was not always initiated from the top down. These moments hinted at subtler dynamics, where AI suggestions seeded directions, Maya may not have otherwise pursued.

In contrast, high-uncertainty scenarios seemed to blur those roles. Here, creative direction appeared more fluid, with Maya and the AI taking turns in initiating, interpreting, or redirecting the process. Surprising outputs from the AI prompted Maya to rethink initial intentions, while ambiguous prompts from Maya led the AI to fill interpretive gaps with unexpected combinations. These looser interactions opened space for a wider range of actants to enter the scene:

environmental sounds, cultural references, dataset artefacts—all influencing the direction without explicit orchestration.

Such fluidity resonates with Hutchins' notion of distributed cognition, in which cognition is also spread across tools, systems, and environments. In these more improvisational contexts (1), Maya seemed to lean more heavily on external supports—AI suggestions, sonic archives, prior iterations—as thinking partners. As Gundlach suggests, AI systems may "expand the idea space" by introducing patterns and connections that exceed a single individual's domain of experience (40).

Analytical Implications

These reflections do not suggest a stable blueprint for future creativity but rather outline a provisional understanding of its evolving configurations. The interaction between crealectic and computational modes may offer fertile ground for new forms of hybrid authorship, where neither human nor machine dominates, but where each contributes according to its strengths and limitations. As the quadrant scenarios illustrated, this balance is always contingent, shaped by technological capability, cultural framing, and the intentional stance of the human creator. What emerges, then, is not a fixed model of co-creation, but a spectrum of possible futures in which creativity is no longer housed in singular minds or systems.

Towards an Ethic of Entangled Care

As AI becomes increasingly embedded in creative workflows, the concept of ethical responsibility must evolve in tandem with conceptual models of agency. Rather than treating ethics as a set of universal rules, this section offers a situated approach: a flexible, quadrant-sensitive ethics grounded in the realities of distributed authorship, machinic influence, and sociotechnical context. The following principles reflect insights from Maya's co-creation session and the surrounding analysis, seeking to integrate philosophical reflection with practical guidance. Each is not an instruction but an invitation to cultivate ethical attentiveness within entangled creative assemblages.

Disclose and Contextualise AI Contributions

Ethical clarity begins with transparency. Whether AI involvement is minimal or generative, acknowledging its role helps resist the persistence of the solitary genius myth and simplistic narratives of human originality. In Maya's session, several turning points posed subtle dilemmas around authorship. Rather than framing these moments as binary (human vs. machine), disclosure becomes a practice of relational accountability.

Posthuman ethics does not call for anthropomorphising AI, nor does it equate algorithmic output with sentient intention. Instead, it proposes a broader ethical visibility, recognising how machinic processes, training data, and computational mediation shape creative outcomes. Disclosure is not just about credit, but about tracing the ecology of production: surfacing the hidden infrastructures, tools, and patterns that condition both the aesthetic and ethical dimensions of a work.

Attribute influence, not just authorship

Attribution in hybrid creativity cannot rely on linear origin stories. As seen in Maya's session, many of the most compelling moments emerged from co-constructed processes, where human intention and machinic suggestion blurred together. When AI outputs mirrored familiar styles or echoed known tropes, Maya sensed that presenting them as purely original would be an ethically reductive approach. This raises the need to attribute influence across datasets, prompt structures, interface design, and cultural reference points.

Rather than asking "who made this?", a more appropriate framing is: "What assemblage produced this effect, and what voices, systems, and histories does it draw from?" This shift encourages broader accountability towards the archival labour of datasets, the engineers who shape models, and the implicit value systems encoded in generative processes. Ethical attribution, therefore, requires not just naming the tool but contextualising its genealogies and affordances, much like how a film's end credits sequence acknowledges the layered, collaborative networks behind its creation in detail.

Anticipate and Interrupt Bias

AI systems do not create in a vacuum. They reflect the data they were trained on, the cultures they emerge from, and the economic imperatives they serve. In Maya's session, moments where the AI defaulted to male vocalists in rock arrangements illustrated a subtle but pervasive bias—one that risked constraining genre identity to a narrow demographic frame. Such patterns are not intentional, but their effects are real.

Creative practitioners must develop sensitivity to these patterns and remain willing to intervene. This includes prompt design that foregrounds diversity, the refusal of clichés, and reflexive attention to what remains invisible in the outputs. Ethical labour in co-creation is often micro-scale: Maya's re-prompting to counter stereotypical suggestions or her effort to make space for affective nuance were forms of bias interruption.

Bias cannot be fully eliminated, but it can be made visible and worked against. Posthuman ethics calls for a relational attentiveness, an active awareness of the exclusions baked into tools, styles, and expectations. Within co-creative assemblages, this vigilance becomes part of the creative process itself.

Avoid Moral Outsourcing

In human–AI collaboration, it may be tempting to offload moral responsibility onto the system, especially when outputs are unexpected, flawed, or ethically questionable. Yet as the session illustrated, when AI suggestions edged into cliché or surfaced culturally insensitive associations, it was Maya who ultimately decided whether to incorporate, revise, or reject them. Responsibility, even in distributed contexts, remains a human task.

Posthuman ethics rejects both extremes: AI as a morally autonomous actor, and AI as a neutral tool without consequence. Instead, it foregrounds situated responsibility, where humans are accountable because they remain the only moral agents within the assemblage. This doesn't mean treating AI as malicious or dangerous, but recognising that creative systems are embedded in wider political and cultural infrastructures.

Implement Iterative Feedback and Ethical Review

Creative work with AI unfolds across time. In the session, Maya rarely accepted outputs at face value. Instead, she engaged in cycles of prompting, evaluating, and refining, using AI not just as a generator, but as a sparring partner. This iterative rhythm enabled her to detect bias, refine her aesthetic goals, and redirect when outputs deviated from her ethical or conceptual intent.

Embedding ethical reflection into these loops is essential. Rather than reserving judgement for post-production, practitioners can treat each creative iteration as a site of review: What assumptions are embedded here? Whose voices are being amplified or excluded? What values does this aesthetic communicate? In my opinion, these questions can enrich the creative output.

Posthuman creativity is not inherently ethically neutral. It must be configured as such through intentional practice. Iterative review, then, becomes a method for aligning technical fluency with human values, one small recalibration at a time.

Consider Data Provenance and Infrastructural Responsibility

Behind every generative output lies a chain of human and machinic labour—datasets curated or scraped, models trained on copyrighted or communal work, interfaces designed to guide interaction. Ethical creativity requires assessing the output and understanding its conditions of possibility.

In the session, Maya encountered moments where the AI's stylistic suggestions echoed recognisable musical idioms or invoked cultural tropes she hadn't explicitly referenced. These instances highlight embedded, untraceable influences from training data, underscoring the ethical ambiguity of originality claims. Acknowledging data provenance, even when imperfect, is part of attributive care.

Transparency about system lineage, bias inheritance, and training data sources shifts ethical attention from surface outputs to deeper systems of production.

This doesn't demand perfect recall, but ongoing attentiveness: a willingness to question where creative material comes from and whose voices it may echo or omit.

Final Reflection

The exploration of hybrid human–AI creativity in this thesis has made it increasingly clear that ethical responsibility cannot be an afterthought. As creative agency becomes more distributed across human and nonhuman contributors, the frameworks we use to guide authorship, attribution, and accountability must evolve in tandem. The quadrant scenarios and Maya's session demonstrated that these are not abstract concerns; they arise in specific creative decisions, such as whether to credit AI with shaping an idea, how to interpret an unexpected output, or whether a generated fragment carries problematic cultural assumptions.

This framework of entangled care is not meant to dictate fixed solutions, but to offer a way of thinking through these problems that foregrounds context, relationality, and attentiveness. For example, a simple act like disclosing AI involvement becomes ethically meaningful when it challenges outdated myths of the isolated genius. Similarly, attributing influence helps signal the many layers of creative mediation involved in generative processes. These insights are not only theoretical but directly applicable to how I want to navigate future creative and professional work.

Whether working on audio-based projects, managing creative collaborations, or contributing to AI-integrated workflows, I plan to carry forward these principles by actively questioning how value is created, whose labour is made visible or invisible, and how decisions around tool use affect meaning. I do not assume ethical certainty will always be possible, but I do believe ethical attentiveness is. This means committing to practices that remain open to revision, shaped by dialogue with others and grounded in the complexities of each situation.

CONTRIBUTION TO SCHOLARSHIP

Taken together, these contributions consolidate existing theories of distributed creativity and posthuman ethics and extend them into speculative and hybrid methodological territories that remain underdeveloped. By fusing speculative methods with situated session analysis, this thesis introduces a way of treating speculative design as a projection on which you can build a mode of inquiry that feeds back into theoretical refinement. It thus bridges a persistent gap between conceptual framings of hybrid authorship and the practical realities of emerging co-creative tools.

This extension invites further research into how distributed agency unfolds across disciplines and platforms, particularly as generative systems become integrated into everyday creative workflows. Rather than presupposing what creativity is or should be, the quadrant model enables researchers to explore how sociotechnical configurations shape what creativity can become. It offers a flexible lens for analysing future collaborations not yet stabilised into norms, and for evaluating tools and practices that resist easy classification within either human-centric or machinic paradigms.

Ultimately, the thesis aims to reframe hybrid creativity as a site of design, negotiation, and care. In doing so, it supports a shift from asking whether AI can be creative toward understanding how we co-create responsibly across entangled ecologies, and which futures we implicitly endorse through the tools, practices, and ethics we build today.

REFLEXIVITY & POSITIONALITY

This chapter examines how my dual identity as a creative practitioner and academic researcher has shaped the trajectory of this project. By addressing the influence of my background, methodological preferences, and values, I aim to make transparent the epistemic and ethical framing of this work.

CREATIVE PRACTICE AS FOUNDATION

My background in music, audio, and theatre production, spanning small studios to medium- and large-scale performances, deeply informed my approach to creativity in this research. These environments taught me that creative work rarely unfolds in a linear manner. Instead, it thrives in fragments, iterations, and unexpected pivots. This sense of process as emergent resonated with many of the theories I later encountered, particularly crealectics and distributed creativity. The choice to explore hybrid creativity through speculative and narrative methods reflected how, in my work, sense often arises retrospectively, through assembling iterations rather than executing blueprints.

This perspective also informed my discomfort with certain dominant framings in creative education, particularly those that reduce creativity to design strategies or standardised workflows. I experienced firsthand how such framings risk excluding the affective, ethical, and aspirational aspects of creative work that are difficult to model, yet essential. These tensions reappeared throughout the thesis, particularly in discussions of crealectic versus computational creativity, and in the moments where Maya resisted or reframed AI output to retain a sense of expressive depth.

RESEARCH AS CO-CREATIVE PROCESS

This thesis was not simply about hybrid creativity; it was written through the lens of hybrid creativity. Language models played a role in shaping structure, clarifying argumentation, and surfacing contradictions. I interacted with AI systems in multiple capacities: as editors, sparring partners, and sources of

unexpected phrasing or perspective. These interventions were not treated as neutral enhancements but as moments of entanglement, where agency and intent were negotiated rather than given.

These exchanges influenced my understanding of co-creativity. They underscored how ideas emerge relationally, not only between humans and machines, but through shifts in context, rhythm, and tone. When working with voice interfaces, for instance, dialogue sometimes brings clarity faster than text, already suggesting that temporality and embodiment, even in partial form, affect co-creation. These experiences fed directly into how Maya's session was imagined and analysed.

Crucially, this reflexive dimension was not framed as evidence. It did not serve to validate general claims, but to remain accountable to the partiality of perspective. The goal was not to assert neutrality, but to make the scaffolding visible, to show how values, history, and method intertwine in creative research, just as they do in creative work itself.

METHOD-SHAPING BIASES

All research carries the imprint of the researcher's perspective. In this case, my background in media arts and research on creative industries consistently shaped how questions were framed and methods were selected. I approached the project as a situated inquiry, aware that the choices I made around scenario construction, tool use, and thematic emphasis would reflect both my disciplinary alignment and personal disposition.

A persistent thread in my outlook is what might be called cautious optimism —a stance that acknowledges the risks of technological acceleration without defaulting to a dystopian closure. This sensibility informed the development of my framework, not as a predictive model, but as a device to hold space for multiple futures. By resisting deterministic thinking, the quadrant approach created space to explore ethically ambiguous or contextually complex scenarios without resolving them into definitive verdicts.

Culturally, the scenarios were inevitably shaped by the Dutch-European creative ecosystem in which I have lived and worked, where institutional norms, design education, and artistic practice carry assumptions about authorship, innovation, and ethics. While this lens remained partially embedded, the methodology aimed for portability: sketching situations in ways that invite extrapolation beyond regional or disciplinary boundaries.

My working method also mirrored the dynamics under study. I am accustomed to iterative and improvisational processes. Ones that rarely begin with clarity, but find direction through friction, rearrangement, and partial coherence. This informed my willingness to let the writing process remain loosely structured in early phases. Rather than impose order, I allowed AI tools to enter as collaborators: reshaping drafts, surfacing patterns, and proposing structure. In hindsight, this methodological looseness felt less like a flaw than an enactment of the thesis's core proposition: that creativity often emerges through messy entanglements.

Ethical Self-Audit

Throughout this project, I made a conscious decision to foreground the cultural and artistic potentials of AI-assisted creativity rather than centre critiques around environmental impact, data extraction, or geopolitical asymmetries. This was not intended to downplay the urgency of those concerns, but to temporarily bracket them in favour of illuminating a domain that still feels under-theorised: the experiential, imaginative, and ethical textures of human–AI co-creation in the arts.

This choice carries risk. There is always a tension between speculative optimism and technological solutionism, between exploring possibilities and inadvertently endorsing systems that are ethically or politically compromised. I attempted to navigate that tension by maintaining a critical stance throughout the writing process: verifying AI-generated content against established sources, resisting overstatement of AI capabilities, and consistently attributing agency to both me and to the human in the scenario.

Importantly, while AI tools supported certain stages of the research, the responsibility for argumentation, framing, and critical synthesis rests entirely with me. Furthermore, during the editing phase, minimal AI tools were used for rewriting or drafting. I did rely on Grammarly for grammar and style corrections, although the company remains unclear about the extent of AI integration in its backend. Nonetheless, every interpretive idea and compositional decision in this thesis was authored through reflective engagement, not automated output. The use of AI was not concealed, but instead intentionally staged as a research component—tested, contextualised, and critically scrutinised, rather than passively adopted.

In this light, the writing process became an act of methodological demonstration, not only about AI-supported creativity but also one that was performed through it. The goal was not to present AI as a co-author in any legal or philosophical sense, but to show how its presence alters what it means to author at all, particularly in a context where curation, prompting, and evaluative judgement become part of the framework.

By approaching these tools as collaborators instead of neutral instruments, I sought to inhabit the ethical complexity this thesis attempts to describe: a space where agency is shared but responsibility is not dissolved, and where transparency becomes the first step toward accountable creative research.

FUTURE PRACTICE STANCE

Having scrutinised the ethical contours of AI-assisted creativity, I now look ahead. The process of writing this thesis has clarified my current position and shaped how I intend to engage with these tools going forward. I approach future creative practice from a position of situated responsibility: understanding that technologies are neither neutral nor monolithic, and that their integration requires deliberate framing.

Relational authorship will remain a key principle. Rather than isolating acts of authorship to individual agents, I aim to foreground the assemblages that underlie creative work. This involves making visible the interplay between

tools, datasets, human values, and cultural references that shape the outcome. Especially in collaborative or public-facing projects, transparency about these assemblages is not merely a disclosure; it is an integral part of the ethical posture of the work itself.

This also includes context-aware deployment. Not all creative domains benefit from AI intervention. In projects involving culturally sensitive material, marginalised voices, or high symbolic stakes, I plan to apply greater scrutiny before incorporating AI systems into the creative process. The quadrant framework developed in this thesis offers a valuable lens for such assessments, helping to distinguish between exploratory use, responsible augmentation, and contexts where omission may be the more ethical choice.

Speculative design will continue to guide my method. I don't see this approach as a one-off thesis tool, but as an ongoing practice of prototyping futures before committing to them. It enables a kind of ethical rehearsal: imagining scenarios in terms of feasibility, desirability and justice. Before integrating new tools or methods, I aim to test their narrative and relational consequences, not only what they make possible, but what they make harder to see or say.

In practical terms, this means continuing to use AI tools where appropriate—for structuring, iteration, or idea expansion—but also clearly disclosing such use. I do not believe that transparency undermines authorship; rather, it enhances trust and invites more meaningful conversations about originality, process, and influence. Especially in cultural work, where stories and symbols carry significant weight, disclosure becomes an integral part of the creative process.

Crucially, I will resist both the enthusiasm for automation and the anthropocentric retreat. While I recognise the irreplaceable human roles in judgement, framing, and accountability, I also see value in treating AI as a co-extender of imagination. These systems can surprise, recombine, and provoke in ways that sometimes enrich the creative field, provided their affordances are engaged critically and their limitations are understood.

This stance, shaped by theory and tested in practice, carries into future work as pragmatic optimism: open to machine collaboration, grounded in human responsibility, and oriented toward creative ecologies that honour both inspiration and infrastructure.

CONCLUSION

This thesis investigated how generative AI might function as a crealectic actant in reconfiguring human creativity, employing a speculative quadrant-based methodology synthesising distributed creativity, crealectics, sociomateriality, and posthuman ethics.

The simulated co-creative session provided four key insights. First, computational creativity excels in clearly defined combinational and exploratory tasks, but struggles with deeper transformational leaps that involve meaning-making, cultural nuance, and ethical sensitivity. Second, crealectic creativity, anchored in human intentionality and existential imagination, proves essential for guiding collaborative processes, especially under conditions of ambiguity or high uncertainty. Third, the most compelling creative outcomes arise from hybrid interaction: humans establish conceptual and ethical direction, while AI extends the ideational landscape through rapid, combinational novelty. Lastly, the emergent co-creative dynamic complicates conventional notions of intellectual ownership and attribution, calling for new norms that reflect distributed creative agency and data provenance.

These insights advance interdisciplinary dialogues concerning the evolving nature of creativity in an age increasingly shaped by generative AI, suggesting ways human intentionality and technological affordances can productively engage without collapsing into simplistic automation or anthropocentric isolation.

RESEARCH QUESTION

The central research question guiding this thesis was:

"How can generative AI function as a crealectic actant in the reconfiguration of human creativity?"

Generative AI acts crealectically by participating meaningfully within relational assemblages guided by human creators, not by independently

initiating transformative leaps. Within these assemblages, AI amplifies human creative capabilities by broadening ideational spaces, rapidly exploring combinational possibilities, and providing novel stimuli for further human reflection and reinterpretation.

Importantly, AI's crealectic potential remains conditional on sustained human involvement. AI's contributions are inherently catalytic rather than autonomous; they rely on human interpretation, ethical framing, and contextual sensitivity. The genuine "reconfiguration" of creativity, therefore, emerges not from replacing humans but from enriching the relational processes through which human and machine agencies dynamically co-construct new creative realities in various contexts.

PRACTICAL IMPLICATIONS

This thesis offers several practical insights:

For Creatives:

Adopting a collaborative rather than competitive stance toward generative AI can significantly expand creative experimentation and accelerate iterative workflows. However, this approach requires new skill sets, including critical curatorial practices, ethical discernment, and a nuanced understanding of AI affordances.

For Tool Designers:

Creative AI interfaces should explicitly preserve human-in-the-loop dynamics, providing transparent mechanisms for reflective practice and ethical evaluation. Design features should encourage speculative and exploratory uses over purely efficiency-driven outcomes, fostering richer, creative engagements and mitigating the risks of algorithmic homogenization.

For Educators:

Integrating theoretical frameworks such as distributed creativity and crealectics into arts and design education is crucial. Preparing students for hybrid creativity involves cultivating both collaborative fluency with AI tools and critical awareness of their ethical, cultural, and epistemic implications.

For Policymakers:

Intellectual property frameworks must evolve to reflect emergent modes of hybrid authorship, requiring flexible, context-sensitive attribution models. Policymaking should also support guidelines for transparency in AI use, data provenance disclosure, and fair recognition of creative labour within hybrid human-AI contexts.

LIMITATIONS

Several significant limitations must be recognised. The empirical component involved a single simulated co-creative session with one individual using text-based AI interactions, which limits the generalisability of the findings. The speculative quadrant methodology, while systematic, inherently carries subjective interpretive biases informed by my background, cultural context, and methodological preferences. Moreover, this thesis explicitly adopted an optimistic perspective on human-AI creativity, intentionally setting aside significant ethical issues such as environmental impact, labour displacement, and surveillance implications—topics deserving thorough separate investigation. Lastly, the quadrant model itself, though analytically helpful, simplifies the complexity of real-world creative industries and the nuanced interplay between cultural values, institutional constraints, and technological affordances.

DIRECTIONS FOR FURTHER RESEARCH

This thesis opens several promising pathways for further exploration. Future studies could extend the insights gained from individual simulated sessions by

examining multi-participant human-AI interactions. Investigating how distributed creativity manifests within group contexts would provide valuable insights into collective dynamics, collaborative agency, and the negotiation of shared authorship.

Expanding the scope of research to include diverse modalities beyond textual and musical outputs—such as visual art, video, performance, and coding—could further illuminate the creative affordances and constraints unique to each domain. Multimodal or cross-modal creative AI systems may reveal novel interaction patterns, deepening understanding of how human creativity might evolve alongside these technologies.

Interdisciplinary work remains essential for addressing ethical challenges surrounding hybrid authorship and attribution. Research should actively develop transparent systems of attribution and recognition that reflect the complex sociotechnical assemblages inherent in AI-assisted creation. Investigations into cross-cultural perceptions and practices of human-AI co-creativity could enrich theoretical frameworks, challenge potentially Eurocentric biases and highlight globally diverse creative responses to AI integration.

Longitudinal studies are particularly needed to track how creative practitioners adapt to, integrate, or resist AI tools over extended periods. Such research would offer insights into evolving workflows, changing cognitive strategies, shifting norms of authorship, and long-term ethical considerations.

Ultimately, this thesis highlights the genuine reconfiguration that occurs within human-AI creative assemblages. Further research should explore how such assemblages can best amplify human creativity ethically and responsibly. This ongoing challenge requires continual theoretical refinement, methodological innovation, and practical experimentation.

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