I'll Be Your Mirror: Disaggregating Technological Affordance from Developed Competence in AI-Augmented Practice

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"I'll be your mirror
Reflect what you are, in case you don't know"
'I'll be your mirror' (1967 Lou Reed song)

Abstract

Scholarly commentary on human-AI engagement has focused on multiple themes, including cognitive offloading and 'metacognitive laziness'; the measurement of human-AI productivity and output quality; and the identification of AI literacy as a set of prerequisite competencies. Another conversation is emerging, exploring capabilities developed through intentional interaction with generative AI. This paper contributes to that conversation through a structured practitioner reflection on the development of the *Poltu Books*, a series of ten children's picture books. The reflection explores five dimensions (narrative and conceptual architecture; visual and structural design; workflow and production; publishing and positioning; holistic competence) across three analytical layers (prior knowledge; technologies; and developed practice). By disaggregating technological affordance from practitioner learning, the reflection delineates where new competence emerges in this case. Grounded in established traditions of professional learning, including the Dreyfus model, Schön's reflective practice, Polanyi's account of tacit knowledge, and Kolb's experiential learning cycle, the analysis identifies key dynamics: the compression of skill acquisition cycles, a recursive relationship between reflection-in-action and reflection-on-action, and the systematic surfacing of aspects of tacit knowledge through iterative demands for explicitness. Central to these dynamics is the reframing of the generative system as a diagnostic mirror that requires the practitioner to consistently justify and refine internal evaluative criteria. This process may provide a counter-dynamic to metacognitive laziness by requiring sustained diagnostic demand, ultimately locating authorship in the governing intelligence that orchestrates the multi-model workflow.

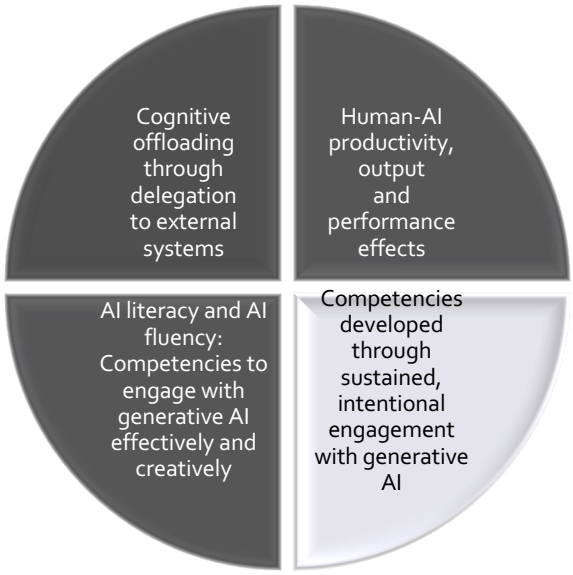
Keywords: generative AI, human-AI collaboration, reflective practice, professional learning, cognitive offloading, tacit knowledge

1. Introduction

The rapid integration of generative AI across academic, professional, and creative domains has concentrated scholarly commentary around multiple established themes (Figure 1). One body of commentary, drawn predominantly from cognitive science and educational research, explores 'cognitive offloading': the delegation of cognitive tasks to external systems in ways that reduce cognitive demand (Risko & Gilbert, 2016). Recent studies have cautioned that reliance on generative AI may diminish critical thinking, and trigger what Fan et al. (2025) designate as 'metacognitive laziness'. Others have cautioned that users may accumulate 'cognitive debt' (Kosmyna et al., 2025) particularly in educational settings where students delegate analytical and compositional tasks to large language models (LLMs). A second body of work, exemplified by empirical research measuring productivity and labour-market outcomes in AI-augmented workflows (e.g., Hartley et al., 2026), has focused predominantly on output quality, task completion speed, and performance effects (Chen et al., 2025; Fruits & Stout, 2026), with comparatively little attention to what practitioners learn through human-AI interaction. A third

body of commentary has focused more broadly on defining AI literacy; examining prompting, evaluation, and responsible use; addressing governance, risk, and inequality; and exploring how AI literacy is being developed across education, policy, law, and the workplace (Almatrafi et al., 2024; OECD, 2025; UNESCO, 2024). This literature frequently emphasises inputs to be acquired in advance of practice, with the field shifting from generic digital skills to AI literacy/competence and AI fluency dependent on context, role, judgement, and institutional setting (Kennedy, 2025; Rogers & Carbonaro, 2025).

Figure 1. Distinct Bodies of Commentary on Generative AI in Practice



By contrast, fewer scholarly studies provide systematic, practitioner-level reflection on the competencies that develop through sustained, deliberate engagement with generative AI. An emerging, fourth conversation has begun to address this gap, using reflective and autoethnographic methods to examine what is learned through the process of working with generative AI (e.g., Creely & Blannin, 2025; Hou, 2025; Panke, 2025). This fourth conversation is not categorically separate from the third, as defining AI literacy/fluency necessarily involves assumptions about what competencies look like in practice. The distinction is one of *orientation*. The AI literacy/fluency conversation tends to specify competence prospectively, as prerequisites for effective human-AI engagement, while the emerging reflective conversation examines how competence develops retrospectively, through the practice itself.

A growing constellation of research centres, particularly in the United States, the United Kingdom and Northern Europe now investigates the human experience of AI through philosophical, ethnographic, narrative, and arts-based methods, asking how AI reshapes what it means to think, create, and work. These methods include phenomenological inquiry into how AI transforms human identity and moral character (Coeckelbergh, 2022; Vallor, 2024), and arts-based research through organisations such as the Creative AI Lab at King's College London and the European ARTificial Intelligence Lab coordinated by Ars Electronica in Austria. Ethnographic and other qualitative studies of creative workers' experience of generative AI (Institute for the Future of Work, 2025), and practitioner-facing scholarship (e.g., BRAID programme in the United Kingdom) are also emerging.

Traditional research and publication timeframes are such that much of this work now appears in non-traditional outlets, including Substack posts, essays, working papers, and opinion pieces. As LLM and related technology capabilities, affordances and practices shift over days rather than years, conventional scholarly publication outlets no longer serve as the primary mechanism for timely knowledge circulation. This shift has produced a rapidly expanding body

of practitioner writing, including story-based approaches that explore the human-AI experience (Artificiality Institute, 2026), and reflective inquiry into critical AI literacy as a practice (Illingworth, 2026). As dedicated autoethnographic research centres remain notably absent, such efforts are conducted predominantly by individual scholars and practitioners rather than institutions. This reflects a domain that is consolidating rather than established. This paper contributes to that emerging conversation, offering a structured reflection on one practitioner's experience of developing generative AI competence through a discrete creative project.

The author's primary motivation, as practitioner, was not the adoption of generative AI for creative production as such, but rather the development of practical AI proficiency through a series of sustained, self-directed projects. The creative domain was chosen as a vehicle for that learning, not as an end in itself: the practitioner held no prior formal credentials in the visual or literary arts. The *Poltu Books*, a series of ten children's picture books developed through AI-augmented workflows from initial concept through to publication and marketing, represent one such project. This paper sits within the tradition of reflective practice research in the Schönian sense, examining one practitioner's experience rather than advancing generalisable claims about AI-augmented creative work. The reflection vignette examines five dimensions of creative practice across three analytical layers (Figure 2). This framework was articulated through reflection-in-action and reflection-on-action (Schön, 1983) conducted throughout the project in dialogue with generative AI systems, and then consolidated retrospectively through systematic examination of the completed project.

Figure 2. Dimensions Disaggregated by Analytic Layers

Dimensions		**Analytic layer**		
		Prior knowledge and disposition	**Technologies and AI capabilities**	**Developed practice**
Dimension 1	Narrative and conceptual architecture			
Dimension 2	Visual and structural design			
Dimension 3	Workflow and production			
Dimension 4	Publishing and positioning			
Dimension 5	Holistic competence			

The structure serves a specific analytical purpose by establishing a baseline of existing skills before assessing new learning. This systematic, layered approach to self-observation aligns with the principles of 'analytic autoethnography' (Anderson, 2006), which emphasises the use of personal experience to develop broader understandings of professional practice.

The first column documents the prior knowledge and dispositions brought to the project. This foundation is largely transferable rather than specific to the domain of writing, illustrating, and designing children's books. It reflects the dispositions of an academic researcher (from a social sciences disciplinary background) entering creative practice without formal creative training: systems thinking, analytical rigour, iterative methodology, and comfort with complexity and ambiguity. From this established baseline, the structure then isolates the specific technologies and AI capabilities deployed in the workflow in the second column. This makes it possible to explicitly disaggregate what the technology contributed from what the practitioner actually learned (developed practice). Collapsing these latter two dimensions, as contemporary discussion on AI and creativity frequently does, obscures the location of developed capability. Separating them allows a more explicit account of where new competence emerged. What the third column documents, by contrast to the first, is the development of new, domain-specific competencies through sustained engagement with AI. The analytical significance of this distinction lies in the relationship between the columns: reading across them reveals what was acquired through the process rather than what was already present at its outset. Ultimately, this reflection not only elucidates the analytical and methodological significance of the project but also aims to seed a nuanced conceptual framing into AI-mediated knowledge circulation for immediate uptake.

The methodological approach was practice-led. The decision to develop AI competencies through sustained creative production was deliberate, as was the commitment to systematic reflection throughout and upon that process. The theoretical grounding emerged retrospectively: established traditions in professional learning offered an analytical language to examine dynamics the practice had demonstrated. The paper proceeds by situating the *Poltu Books* within the practitioner's broader trajectory of AI-augmented publishing, presenting the theoretical foundations, offering the 'reflective table' as a structured analytical synthesis of the practice, and discussing dynamics that emerged from the analysis.

A methodological note on collaboration is warranted. This paper was written collaboratively using a suite of generative AI models including Claude Opus (Anthropic), NotebookLM, and Gemini (Google) as part of the same human-AI working relationship through which the *Poltu Books* themselves were produced. The practitioner was responsible for the reflection, the analytical framework, and all editorial judgements. Within this multi-model workflow, Claude contributed to initial structural organisation, preliminary drafting, and the identification of theoretical resonances. NotebookLM was utilised for source synthesis and corroboration, and Gemini provided critical review.[1]

This collaborative method is not incidental to the paper's purpose. A reflection on human-AI creative practice, purposefully produced through that same practice, examines its subject from within. The methodological consistency is deliberate: the paper constitutes an instance of the phenomenon it analyses, aligning with emerging qualitative approaches where AI dialogue is utilised to generate and analyse its own practice-based methodology (Wiles, 2025). Acknowledging the constraints of higher education systems and traditional academic publishing timeframes in the face of unprecedented technological advances, this paper is released via the Social Science Research Network (SSRN) to enable immediate human readership and algorithmic discovery.

2. Context: The Poltu Books Project

The *Poltu Books* project offers a novel case for examining AI-augmented creative practice for several reasons. It involved a complete production cycle from concept to publication, required competencies across multiple domains (writing, visual composition, design, production, and self-publishing), and was undertaken by a practitioner whose prior expertise was analytical rather than creative, making the trajectory of skill development more visible. The *Poltu Books* are a series of ten children's picture books for ages two to six, located in settings throughout India. The practitioner's familiarity with India is grounded in extensive fieldwork and academic focus, including an ongoing affiliation as an Academic Fellow with the Australia India Institute, University of Melbourne (2023-present), an undertaking as a Visiting Professor at the National Institute of Educational Planning and Administration (NIEPA) in New Delhi (2023), and a sustained portfolio of bilateral policy research analysing Indian higher education and skills systems (2016-present).

Personal photographs taken during research fieldtrips informed the graphics development in several of the *Poltu Books*, most notably images from Jawaharlal Nehru University and Hauz Khas Village (Delhi); the Indian Institute of Technology Hyderabad; the Rock Garden of Chandigarh; Colaba, Mumbai; Pobitora Wildlife Sanctuary, Assam and Mussoorie. Each book comprises 27 to 28 pages, structured around a single contained narrative featuring Poltu, an

[1] This multi-model orchestration was itself a developed competency. Each system was selected for specific affordances: Claude Opus for its handling of complex structural prompts and tonal calibration during drafting; NotebookLM for grounded source synthesis, anchoring analysis in the sourced evidence base; and Gemini for critical review, identifying logical gaps and testing the analytical framework. Learning to identify and sequence these comparative affordances across different architectures is an integral aspect of the developed practice analysed in this paper.

Indian lion-tailed macaque, and a small recurring cast of animal companions. This includes Tutun (sarus crane), Tangy (nilgai antelope), Pulu (elephant), Toffee (dog), Tublu (rhinoceros) and Zoya (cow).

Figure 3. The Poltu Books - Front Covers

The text is minimal, and the illustrations are watercolour-style, generated through AI image generation and refined through a multi-stage production pipeline involving background removal, upscaling, format conversion, and layout integration. The evidence base for this reflection comprised the ten published children's picture books (released as e-books via Amazon Kindle Direct Publishing), alongside an audit trail of project artefacts retained by the practitioner: chat transcripts from interactions with LLMs; multiple drafts of scripts; character and landscape image-generation prompts; folders of generated illustration outputs; marketing and associated copy; and the metadata submitted via KDP during upload and publication. The published e-books remain accessible via the FreemanJoyVentures author website (https://freemanjoyventures.com) and Instagram account (https://www.instagram.com/freemanjoyventures/).

The *Poltu Books* represent a specific stage in a developmental trajectory of human-AI creative practice and AI-augmented publishing under FreemanJoyVentures. Following the venture's launch in January 2024, early work included graphics, children's activity books, the Animal Alphabet Journeys series (including *Indian Animal Alphabet: A Journey from A to Z*) (2024), and the Boo Books (2025), a ten-book series following Boo, a yellow baboon, through short adventures in curiosity and companionship. Each project built incrementally on the previous, developing competencies in AI-augmented image and text generation, design, and production. The *Poltu Books,* created and published in 2025, are the focus of this reflection because they represent the point at which those incrementally developed competencies began to converge into a more integrated practice. They pre-date the more ambitious *Robot Book Series* and *Lumi Chronicles*, set in Sweden following international STEM policy fieldwork, which explore emerging AI consciousness and challenge human exceptionalism. The *Poltu Books* remain early-stage work, in all their vulnerabilities. The value of this case lies not in the quality of the outputs themselves but in the visibility of the learning process they made possible.

3. Theoretical Grounding

This paper draws on four established traditions in professional and practice-based learning. Each offers a distinct analytical lens for interpreting the patterns of development documented in the reflective table, and together they provide a multi-layered account of how practitioner capability develops through iterative engagement with generative AI.

The first tradition is the Dreyfus model of skill acquisition, elaborated in Dreyfus and Dreyfus' 1986 book, *Mind Over Machine*. The Dreyfus (1986) model maps a five-stage progression from novice to expert, characterised by a qualitative shift from rigid rule-following through conscious deliberation to fluid, intuitive performance grounded in accumulated experience. At the novice stage, the learner relies on context-free rules applied without discretionary judgement. The advanced beginner begins to recognise situational elements but remains analytical. At the competent stage, the practitioner engages in conscious deliberation and becomes emotionally invested in outcomes. The proficient practitioner develops holistic situation recognition and sees what is most important intuitively, but still falls back on analytical reasoning to decide how to respond. The expert intuitively grasps the situation, performing fluidly without conscious rule-following (Benner, 1982; Dreyfus and Dreyfus, 1986). The model was developed through observation of practitioners whose learning unfolded over extended periods. Whether AI-augmented practice, which compresses the iterative cycle substantially, produces equivalent depth of acquisition or a qualitatively different form of it is a question for further consideration.

The second tradition is Schön's account of reflective practice, established in his 1983 *The Reflective Practitioner*. Schön (1983) distinguished two modes of professional reflection. Reflection-on-action is a structured, retrospective examination of completed practice, intended to surface what was known, what was done, and what was learned. Reflection-in-action occurs within the flow of practice, where the practitioner notices something unexpected, reframes the situation, and adjusts in real time. Reflection-in-action rests on what Schön termed knowing-in-action: the tacit, intuitive knowledge that enables skilled performance.[2] According to Schön, when a situation presents as unexpected or problematic, the practitioner's attention is drawn to this tacit knowing, prompting reflection within the flow of action itself. Reflection-on-action then allows that experience to be examined retrospectively, and its lessons made available for future practice.

The third tradition is Polanyi's account of tacit knowledge, articulated in his 1966 *The Tacit Dimension*. Polanyi's central proposition was that practitioners consistently know more than they can articulate through explicit rules or criteria. Tacit knowledge, in this account, is not a deficiency to be overcome but a fundamental feature of how human beings engage with the world. Polanyi (1966) observed that the "detailing of particulars" can serve as a guide to their "subsequent integration," yielding a "much deeper understanding" of the practice, even as a core of tacit knowing necessarily remains beyond articulation (p. 19). The relevance of this tradition to AI-augmented practice is direct. Generative AI cannot respond to unarticulated judgement, and the iterative workflow therefore places a specific demand on the practitioner's capacity to make tacit criteria explicit.

The fourth tradition is Kolb's experiential learning cycle, described in his 1984 *Experiential Learning*. Kolb (1984) proposed that learning is not the acquisition of fixed knowledge but a continuous process of transformation through experience, proceeding through four stages: concrete experience, reflective observation, abstract conceptualisation, and active experimentation. Kolb (1984) argued that "learning is *the* major process of human adaptation"

[2] Schön (1983) posits that "the workaday life of the professional depends on tacit knowing-in-action. Every competent practitioner can recognize phenomena … for which he (sic) cannot give a reasonably accurate or complete description. In his (sic) day-to-day practice he (sic) makes innumerable judgements of quality for which he (sic) cannot state adequate criteria, and he (sic) displays skills for which he (sic) cannot state the rules and procedures" (pp. 49-50).

(p. 32; emphasis in original). The Kolb experiential learning cycle suggests that iterative practice is not mechanical repetition. Each cycle has the potential to transform the practitioner's understanding, not merely the output. AI-augmented workflows, which enact this cycle at considerable speed and frequency, offer a distinctive context for examining whether and how such transformation occurs.

While each tradition offers a discrete analytical lens, they function in this reflection as an integrated framework for examining AI-augmented development. Dreyfus provides the trajectory of skill acquisition; Kolb provides the iterative engine through which that acquisition is compressed; Schön provides the reflective modes necessary to navigate that engine; and Polanyi identifies the tacit substance being surfaced through the process. Together, they form a recursive learning cycle where the speed of AI generation forces a constant 'dialogical vetting' (Faraj et al., 2025) of previously unarticulated professional judgement.

4. The Reflective Table

The reflective table below maps five dimensions of creative practice across the three analytical layers described above. While the primary evidence for this study consists of the ten published *Poltu Books* and the retained audit trail of project artefacts (including LLM chat transcripts, script drafts, image-generation prompts, and KDP metadata), the table serves as a structured synthesis of the reflection-on-action conducted upon that evidence.

The specific sub-dimensions emerged as the primary sites of diagnostic demand identified through a systematic audit of these artefacts. They represent the discrete points in the production cycle where the practitioner's prior analytical dispositions were most consistently required to interface with the generative AI system. This synthesis reveals a consistent shift from the transferable analytical competencies brought to the project to the domain-specific creative capabilities developed through it. The integrated theoretical framework established above provides the interpretive lens for reading across these layers.

A note of proportion is warranted: the third column documents competencies that were beginning to develop, not necessarily competencies that were fully acquired. The language of the table necessarily codifies what were, in practice, tentative and uneven gains. Crucially, the grid structure is an analytical convenience that necessarily flattens what was a series of recursive learning loops. The movement from prior knowledge to developed practice was driven by a compressed iterative engine (the Kolb cycle), where each row represents the cumulative outcome of hundreds of rapid generation, evaluation, and revision sequences. The 'steep learning' noted in the visual and workflow dimensions reflects a high-frequency developmental spiral where the AI functioned as a diagnostic mirror, forcing the practitioner to repeatedly reframe their understanding until functional competence emerged.

Table 1: The Reflective Table - Dimensions of Creative Practice by Analytical Layers

	Dimension	Prior knowledge and disposition	Technologies and AI capabilities	Developed practice
Dimension 1: Narrative and conceptual architecture				
1.1	Voice and tonal register	Sensitivity to cadence; preference for understatement; discomfort with performative or ornamental prose.	LLMs (ChatGPT and Claude) for rapid generation of tonal variants enabling systematic comparison across registers.	Codification of voice (style) as an explicit set of constraints rather than instinct alone; accelerated identification of tonal near misses; greater precision in sustaining register across a full sequence.
1.2	Narrative architecture	Systems-level thinking from academic and professional background; comfort with frameworks and productive constraint.	LLMs (ChatGPT and Claude) for efficient outlining, beat mapping, and generation of alternative structural models on demand.	Development of a locked, replicable story skeleton/template (single-day arc, one contained mystery, minimal cast); more deliberate engineering of page-turns, pauses, and structural rests.
1.3	Concept development	Analytical habit of identifying a core idea and testing its coherence; interest in small-scale, dignified phenomena.	LLMs (ChatGPT and Claude) for generative brainstorming of premise variations and motif options (leaf, sound, shadow, ripple).	Refined discipline in keeping mysteries small and internally coherent; greater skill in calibrating ambiguity so it registers as held rather than unresolved, particularly within a child-facing context.
1.4	Language and craft	Attentiveness to rhythm developed through academic writing; an ear for when prose sounds forced or overworked.	LLMs (ChatGPT and Claude) for multiple phrasings, line-break alternatives, and rhythmic reconfigurations available for comparative evaluation.	Consolidation of collaborative (human-AI) drafting and editing as the primary creative acts; significant revision-by-subtraction as default method; sharper recognition and removal of AI-characteristic phrasing patterns (tics) and cultural drift.
1.5	Character and cast governance	Preference for restrained casts and quiet companionship over dialogue-driven characterisation.	LLMs (ChatGPT and Claude) for generation of alternative companion dynamics and functional character-role configurations.	Stronger discipline in treating characters as rhythmic presences rather than speech vehicles; reduced reliance on dialogue as a narrative mechanism.
Dimension 2: Visual and structural design				
2.1	Visual thinking and composition	Interest in architecture, atmosphere, place, and light; no formal visual arts training but a responsiveness to mood and spatial composition.	DALL-E, ChatGPT and NanoBanana (Google Flash Image) for image generation with controlled variation across angle, time of day, palette, blur, and composition.	Acquisition of early art-direction literacy: writing illustration briefs that govern continuity; specifying negative constraints (exclusions, spatial clearances); sequencing visual logic across a 27 to 28-page object.
2.2	Book design as system	Reader's awareness that books are physical and experiential objects; no prior design training but an attentiveness to layout, pacing, and whitespace.	Canva for page layout, typography, and design-system construction; page/book preparation respecting spatial rules.	Integration of design thinking at the systems level: orchestrating text placement, page rests, visual rhythm, and legibility as interdependent elements of a single reading experience.
2.3	Setting and place-based coherence	Interest in real locations, culturally situated settings, and authenticity.	Personal photographs, DALL-E and ChatGPT for rapid ideation of location-specific scenes with architectural and environmental detail.	Greater precision in translating place into recurring visual and narrative motifs without recourse to explicit exposition; maintaining setting continuity across a full sequence.
Dimension 3: Workflow and production				
3.1	Iterative methodology	Persistence, willingness, and intentionality to learn and revise, carried over from doctoral and research experience; a sense for when something is not yet working.	LLMs (ChatGPT and Claude) for near-instant iteration cycles and structured A/B comparison; targeted compression and expansion.	Reframing AI as a diagnostic mirror rather than primarily a generative source; more efficient decision-making; clearer articulation of exclusion criteria (exposition, moralising, adjectival excess, duplication).

	Dimension	Prior knowledge and disposition	Technologies and AI capabilities	Developed practice
3.2	Prompt design as creative practice	Early intuitive prompting; capacity to articulate preferences when directly engaged; developed capacity to evaluate and leverage comparative strengths of different LLM architectures (e.g., tonal nuance) for specific academic and professional tasks.	LLMs (ChatGPT and DALL-E) and NanoBanana for controlled generation via structured prompts; Claude for constraint adherence and systematic variant sampling.	Reconceptualisation of prompts as design briefs; construction of reusable baseline templates; translation and expansion of multi-model orchestration from the academic domain into multimodal creative production (narrative, visual, and design integration).
3.3	Image processing and production pipeline	Diagnostic sensitivity to output quality; recognition of the 'production gap' between raw generative output and professional publication standards, despite lacking formal technical training in digital asset management.	Specialised image-processing suite (Kaleido, Pixelbin) for background isolation and resolution enhancement; automated conversion utilities for format-specific compatibility (WEBP, PNG) across diverse distribution platforms.	Design and implementation of a modular post-production architecture (generation-isolation-upscaling-integration); codification of multi-stage quality assurance protocols to ensure visual fidelity and technical compliance throughout the publishing pipeline.
3.4	Production rigour and quality assurance	Detail orientation and familiarity with systematic processes from academic and professional practice; low tolerance for inconsistency.	LLMs (ChatGPT and Claude) for tracking and checklists; Canva for design-system consistency; rapid regeneration for comparative review. File record-keeping (iMac; Dropbox; Canva).	Implementation of systematic quality assurance protocols (cadence read-throughs, visual continuity checks, contrast, and legibility audits); formal definition of acceptance criteria; construction of repeatable production pipelines.
Dimension 4: Publishing and positioning				
4.1	Publishing and distribution	Analytical understanding of publishing lifecycles from a research perspective; awareness of book production as a structured process without previous operational experience as a publisher.	Amazon Kindle Direct Publishing (KDP) for global distribution; LLMs for metadata optimisation; ISBN management systems and category placement tools.	Navigating the technical and logistical requirements of independent publishing platforms; aligning creative output with rigid template specifications and marketplace metadata standards.
4.2	Series-level scaling	Strategic thinking and an ability to build coherent systems, drawn from professional experience.	LLMs and image generators (DALL-E, ChatGPT, NanoBanana) for template-driven consistency; Canva for replicable design; cloud storage for asset management.	Developing a repeatable production methodology to maintain series coherence; moving from single-book creation to managing a broader catalogue of related works.
4.3	Public positioning and marketing voice	Ability to articulate thematic values without overexposure; instinct for a considered register, though no marketing background.	LLMs (ChatGPT and Claude) for drafting marketing blurbs, captions, and positioning copy; Instagram for audience engagement and brand presence; platform-specific tone calibration.	More precise positioning language; capacity to communicate method and creative stance without personal vulnerability; adoption of a principled operational frame for public-facing discourse.
Dimension 5: Holistic competence				
5.1	Creative authorship and confidence	Capacity to hold a research and professional project vision through sustained refinement; entering creative practice without formal creative credentials.	Full technology stack in combination: LLMs for text; generative AI for imagery; processing technologies for production; publishing platforms for distribution; social media for positioning.	Strengthened understanding of authorship as the exercise of intent, constraint, and selection, not necessarily the manual production of all text or image. The creative core resides in the governing intelligence that orchestrates the workflow, not necessarily in any single technology

	Dimension	Prior knowledge and disposition	Technologies and AI capabilities	Developed practice
				within it. This process reframes the generative system as a diagnostic mirror that surfaces and codifies previously tacit evaluative criteria, confirming that authorship is located in the human capacity for articulate judgment and orchestration.

5. Discussion

The structured synthesis presented in Table 1 reveals several patterns that merit systematic examination. The trajectory of development across the five dimensions was most pronounced where the practitioner had the least prior expertise. This trajectory is fundamentally recursive: the domain-specific capabilities documented in the third column of the table actively recalibrate the practitioner's starting dispositions, establishing a new baseline for the subsequent projects in the practitioner's portfolio. To interpret the specific mechanics of these shifts, the following (Figure 4) explicitly maps the operational theoretical lenses to the practice dimensions.

Figure 4. Theoretical Mapping of Practice Dimensions

Practice Dimension		Longitudinal Arc	Operational Lens	Developmental Mechanism
1	Narrative and conceptual architecture	Dreyfus model of skill acquisition	Schön's account of reflective practice	Recursive vetting: Rapid alternation between reflection-in-action (real-time tonal calibration) and reflection-on-action (thematic consolidation).
			Polanyi's account of tacit knowledge	Codification: Surfacing and articulating existing tacit dispositions (e.g., analytical habits, ear for cadence) into explicit narrative constraints.
2	Visual and structural design	Dreyfus model of skill acquisition	Schön's account of reflective practice	Diagnostic reframing: Utilising generative AI 'near misses' as mirrors to reframe visual prompts and establish structural page-turn logic.
			Polanyi's account of tacit knowledge	Literacy acquisition: Translating intuitive atmospheric responses into explicit art-direction literacy and systematic visual continuity protocols.
3	Workflow and production	Dreyfus model of skill acquisition	Kolb's experiential learning cycle	Acceleration: A compressed iterative engine that drives rapid generation-evaluation-revision cycles.
4	Publishing and positioning	Dreyfus model of skill acquisition	Dreyfus model of skill acquisition	Operational translation: Moving from analytical observation to functional command of publishing logistics and metadata standards.
5	Holistic competence	Dreyfus model of skill acquisition	Integrated Framework	Convergence: The integration of developmental arcs into the governing intelligence of the practitioner.

Within the universal arc provided by the Dreyfus model, the mechanics of development are illuminated by specific operational lenses. As detailed in Figure 4, Schön's reflective modes provide the mechanism for recursive vetting and diagnostic reframing within the creative design layers (Dimensions 1 and 2). Simultaneously, Polanyi's lens identifies the codification and literacy acquisition occurring as tacit sensibilities are forced into explicit criteria. Kolb's experiential learning cycle explains the compression within workflow and production (Dimension 3), where high-speed iteration accelerates the acquisition process. These dynamics converge in holistic competence (Dimension 5), locating authorship in the governing intelligence that orchestrates the human-AI relationship.

Mapped against the Dreyfus model of skill acquisition (Dreyfus and Dreyfus 1986), the baseline established in the first column of the reflective table (the practitioner's transferable analytical competencies) functions as the novice entry point into the creative domain (see Table 1). The third column then records the trajectory of development. The reflection reveals the shift away

from purely analytical reliance toward the more context-sensitive, increasingly intuitive practice characteristic of advancing proficiency (located between advanced beginner and competent with publication of the *Poltu Books*). What distinguishes AI-augmented practice in this context is how this progression was achieved. Not through years of formal creative training, but through the human-AI dynamics elaborated in this reflection.

The analysis reveals that the trajectory was not uniform. The most pronounced development occurred in the workflow and production dimensions, and in visual and structural design, where the practitioner had least prior expertise. In these dimensions, the learning curve was steepest as entirely new competencies were acquired: art-direction literacy, modular post-production architecture, prompt design as creative practice. By contrast, the narrative and conceptual architecture dimensions show refinement and codification of dispositions that were already present, albeit tacitly, at the commencement of the *Poltu Books* project. Sensitivity to cadence, for instance, was carried into the project from academic writing. What developed was the capacity to codify that sensitivity as an explicit set of constraints (e.g., voice calibration guides).

The publishing and positioning dimensions occupy a middle ground. In these dimensions, the practitioner brought analytical understanding of publishing systems but no operational self-publishing experience, and the development documented is the translation of systemic thinking into practical command. This suggests that AI-augmented practice may function differently depending on the distance between the practitioner's existing (commencing) expertise and the demands of the dimension relative to specific cases. Where the gap is widest, the development is most visible. Where prior dispositions are strongest, the development takes the form of articulation and refinement rather than basic acquisition. The extent to which AI-augmented practice, comparative to other professional learning approaches, expedites this development requires further consideration.

In this reflection, four dynamics are particularly noteworthy, each with potential implications for how AI-augmented professional learning is understood, supported, and evaluated.

First, the compression of skill acquisition cycles. The Dreyfus model was developed through observation of practitioners whose learning unfolded over years. Generative AI accelerates the iterative cycle substantially, enabling the practitioner to move through hundreds of generation-evaluation-revision sequences within a single project. Each such sequence constitutes a complete iteration of what Kolb described as the experiential learning cycle: concrete experience (generating output), reflective observation (evaluating it against criteria), abstract conceptualisation (identifying what needs to change), and active experimentation (revising the prompt or constraint). Over the course of producing a full picture book, hundreds of such iterations occurred. The competence documented in the third column did not arise from isolated insight but from the cumulative effect of repeated cycles, each refining the practitioner's judgement incrementally.

Lin and Sohail (2026), discussing academic workflows, argue that the accelerated feedback and iteration processes associated with human-AI engagement compresses the learning cycle. They recommend the deliberate cultivation of 'AI meta-skills': strategic direction, critical discernment, and systematic calibration. Whether this compression produces equivalent depth of skill acquisition or a qualitatively different form of it remains an open question. The answer matters for how educational and professional development programmes might adapt to accommodate these altered dynamics.

Second, the relationship between reflection-in-action and reflection-on-action appears, in AI-augmented practice, to be recursive rather than merely sequential. In conventional practice as conceptualised by Schön (1983), these modes tend to operate in sequence. The practitioner

reflects within the flow of action, then examines the completed action retrospectively. In AI-augmented workflows, the speed of the production cycle allows the two modes to alternate rapidly and repeatedly, each shaping the quality of the other. The AI-augmented workflow that produced the Poltu Books involved frequent reflection-in-action, evaluating generated outputs against aesthetic and functional criteria, recognising tonal misalignment, and refining constraints iteratively. The systematic reflection-on-action documented in the reflective table was itself shaped by the habits of reflective attention developed through research practice, and through months of reflection-in-action during the creative production process.

This interpretation is consistent with recent conceptualisations of AI as a reflective system rather than simply a generative agent (Sarpong, 2025; Wiles, 2025). Sarpong (2025) argues that such systems function as 'mirrors' that render misalignment, contradiction, and drift visible within recursive interaction, shifting the role of AI from production to the support and structuring of evaluative judgement. In this framing, the value of the human-AI interaction lies not in output generation but in the system's capacity to sustain recursive reflection long enough for patterns of evaluative judgement and coherence to emerge. What is produced through this recursive structure is not only insight but the progressive externalisation of evaluative judgement. Through AI-augmented recursion, criteria that would ordinarily remain tacit are surfaced, tested, and stabilised through repeated interaction, giving recursive reflective practice a cumulative and increasingly stabilised structure of evaluative judgement.

Third, the systematic surfacing of aspects of tacit knowledge. Every iteration in an AI-augmented workflow requires the practitioner to specify what they want, identify what is inadequate about a generated output, and articulate the criteria by which they are evaluating the result. This demand for explicitness operates as a mechanism for converting aspects of tacit professional knowledge into explicit, communicable criteria. The reflective table nominates several such instances, including sensitivity to cadence, a diagnostic sense for when something is not yet working, responsiveness to mood and spatial composition. These were dispositions carried over from academic and professional practice but had not previously been examined or codified for this project. The AI-augmented workflow surfaced them. When a generated output was recognised as inadequate, the practitioner was required to identify why, in terms specific enough to inform a revised prompt or constraint.

Faraj et al. (2025) refer to the structural requirement to articulate previously tacit knowledge in evaluative criteria when assessing AI outputs as 'dialogical vetting'. Their analysis frames LLMs as 'epistemic monsters' that destabilise the boundary between "tacit and explicit knowledge, between user and system, between knowing and unknowing" (Faraj et al., 2025, p. 5). Practitioners engaged iteratively in 'knowing-with-LLMs' are forced to explicitly justify standards they had previously applied without articulation, through a series of recursive practices (Faraj et al., 2025). This dynamic, depicted in the reflective table, aligns with Polanyi's observation that the "detailing of particulars" can yield a "much deeper understanding" of the practice (Polanyi, 1966, p. 19). The implications of this dynamic are worth noting. AI-augmented creative practice may function not only as a production method but as a form of structured self-examination. Human-generative AI engagement requires the practitioner to articulate aspects of their implicit understandings explicitly, in order to direct the work effectively. The practitioner who cannot specify sufficient criteria cannot direct the process. The iterative workflow therefore places a sustained demand on self-knowledge that conventional creative practice does not impose with the same frequency or consistency.

Fourth, a potential mitigation of 'metacognitive laziness' through a sustained diagnostic demand, under some conditions. While recent studies have cautioned that reliance on generative AI may trigger a decline in critical engagement and 'metacognitive laziness' (Fan et al., 2025), the iterative methodology documented here suggests the potential for a counter-dynamic, at least under some conditions for practitioners undertaking similar projects. This

aligns with Maranger's (2025) argument that learning processes may either reinforce surface-level ('single-loop') corrections or enable deeper, more transformative ('double-loop') change, depending on contextual conditions and governing structures. In the present case, the reflective gains documented appear to have depended not on AI use alone but on a practice structure that sustained inquiry, iteration, and evaluative scrutiny.

Where generative AI responds poorly to unarticulated preferences or contextual inputs, this can force the practitioner to enter a state of heightened, rather than diminished, cognitive awareness. While metacognitive offloading is more likely to occur when AI outputs are perceived as acceptable, inadequate results significantly increase the load on cognitive, metacognitive, behavioural, and emotional processes. Every generated output that fails to meet the intended tonal or visual register functions as a diagnostic mirror, requiring the practitioner to explicitly define the gap between the result and the goal.

Lee et al. (2025), surveying over 300 knowledge workers, found that practitioners with higher task-specific self-confidence engaged more critically with AI outputs; however, as confidence in generative AI increases, critical thinking decreases. Having observed that participants' critical thinking shifted in human-AI engagement to verification of AI responses, Lee et al. (2025) caution against over-reliance and consequent diminution of independent problem solving. The synthesis presented in the reflective table, alongside scholarly studies such as Lee et al. (2025), depicts a complex interplay between task-expertise (e.g., novice-to-expert stages), confidence in generative AI, and critical thinking. Whether sustained verification, adjudication, and refinement can mitigate the cognitive costs of AI reliance is a question this reflection raises but cannot resolve.

Several limitations warrant acknowledgement. This is a single-practitioner reflection, and the five dimensions, the assessment of competency development, and the identification of dynamics are all self-reported. There is no external validation of the competencies claimed in the third column, nor independent verification that the progression documented reflects the depth of acquisition rather than the practitioner's perception of it. The methodology is consistent with the Schönian tradition of reflective practice, which relies on the practitioner's capacity for honest self-examination, but it does not claim the evidential status of externally assessed skill measurement. The practitioner's existing research background, which provided both analytical frameworks and a disposition toward structured reflection, may have shaped the dynamics in ways that would not replicate for some others. The Lee et al. (2025) finding on task-specific self-confidence thresholds suggests this is a material consideration.

The final row of the reflective table identifies what these dynamics produce in aggregate: a strengthened understanding of authorship as the exercise of intent, constraint, and selection, rather than the manual production of all text or images. Creely and Blannin (2025), drawing on Ihde's concept of 'alterity relations' from philosophy of technology, posit that creative output emerges from the human-AI relationship rather than being authored by either party alone. The creative core, illustrated in the reflective table emerging from this practitioner's account, resides in the governing intelligence that orchestrates the workflow, not in any single intelligence or technology within it. This is a practitioner's observation, not a theoretical claim. Its generalisability remains to be tested.

6. Conclusion

This reflection documents an exploratory foundation. While the competencies identified here emerged through the *Poltu Books* project, the three-column analytical framework may have broader utility. Specifically, it offers a method for disaggregating technological affordance from developed human capability; a distinction that is frequently collapsed in both public and

scholarly discourse. Whether this framework proves useful for other practitioners entering new domains through AI-augmented workflows is a question for further assessment.

The theoretical grounding of this study suggests that AI-augmented creative practice is legible through established traditions of professional learning. The dynamics identified, compressed skill acquisition, recursive reflection, the surfacing of tacit knowledge, and a potential mitigation of 'metacognitive laziness', constitute recognisable extensions of the phenomena described by Dreyfus, Schön, Polanyi, and Kolb. What appears distinctive in the AI-augmented context is the speed, frequency, and consistency of the demand the generative technology places on the practitioner's capacity for self-knowledge and articulate judgement.

The convergence of these dynamics is noted here as an observation from a single case, not as a generalisable finding. Whether these patterns hold across other practitioners, creative practices or domains remains to be seen. This paper offers one practitioner's account as a contribution to an emerging conversation about the nature of competence in an age of generative AI. The learning documented here is ongoing, and the extent to which these dynamics fundamentally reshape professional practice remains a subject for continued inquiry.

While this reflection focuses on the *Poltu Books* as an exploratory foundation, the methodology documented here has informed subsequent work of greater complexity and ambition. Future inquiry will examine how the dynamics identified in this paper evolve as the practitioner moves from short-form visual narratives into sustained, long-form literary production.

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Appendix 1: Technology Stack for the *Poltu Books*

1. Large Language Models (LLMs): Utilization of Claude Opus (Anthropic) and ChatGPT (OpenAI) for high-level narrative architecture, semantic structuring, and recursive drafting. These models served as 'diagnostic mirrors' for iterative refinement of tonal and structural constraints.
2. Generative Vision Models: Deployment of NanoBanana (Gemini Flash Image, Google), DALL-E and ChatGPT (OpenAI) for multimodal asset generation. These models were used for high-fidelity visual development and the systematic exploration of atmospheric registers.
3. Post-Production and Asset Isolation: A modular pipeline involving Kaleido for specialised background isolation and Pixelbin for super-resolution upscaling and visual fidelity enhancement. This stage addressed the 'production gap' between raw generative output and professional publication standards.
4. Systemic Design and Layout: Use of Canva as a design-system management platform for typographic integration, page orchestration, and cross-platform layout consistency.
5. Global Distribution Infrastructure: Implementation through Amazon Kindle Direct Publishing (KDP) for marketplace integration, ISBN management, and global e-book distribution.
6. Positioning and Engagement Tools: Strategic use of Instagram and FreemanJoyVentures Etsy outlet for brand-voice calibration, audience engagement, and secondary digital asset distribution.

Appendix 2: AI-Augmented Production Pipeline

To complement the technology stack listed above, Figure 5, below demonstrates the orchestration of discrete AI capabilities into a cohesive professional workflow, moving from initial creative concept to global marketplace integration.

Figure 5. The Staged Modular Architecture for *Poltu Books* Production

- Step 1: Creative Generation
  - Process: Orchestrating multi-stage text-to-image and text-to-text workflows, including narrative beat mapping and semantic structuring.
  - Tools: LLMs (Claude Opus and ChatGPT) for structural planning; Image generators (NanoBanana, DALL-E and ChatGPT) for visual asset creation.
- Step 2: Asset Isolation
  - Process: Extracting primary visual subjects from generative backgrounds to ensure layout flexibility and modular design.
  - Tools: Specialised background isolation utilities (Kaleido).
- Step 3: Technical Refinement
  - Process: Addressing the production gap by enhancing visual fidelity, upscaling resolution, and ensuring format compatibility for professional publication standards.
  - Technologies: Automated upscaling platforms (Pixelbin); format conversion utilities (e.g., WEBP to PNG); and file record-keeping (iMac; Dropbox; Canva).
- Step 4: Systemic Integration
  - Process: Finalising page orchestration within a replicable design system and managing global distribution logistics.
  - Tools: Design platforms (Canva) for typography and layout; Amazon Kindle Direct Publishing (KDP) for global distribution.