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Technological futures are increasingly framed as inevitable, with computational systems positioned as the natural pathway to progress and improvement. This determinist rhetoric shapes expectations about what futures are plausible and worth pursuing. Such rhetoric is reinforced through institutional settings—such as higher education—where these technological imaginaries are repeatedly proposed, rehearsed, and normalised through procedural logics of legitimacy that narrow what can be articulated as “realistic”. To examine these conditions, the paper uses Research through Design and Design Fiction as reflective practices for surfacing how futures are normalised through research and pedagogical practices. The paper presents a reflective analysis of a series of Design Fiction artefacts (diegetic prototypes) based on the archetype of institutional promotional media. The reflective analysis shows how optimisation-centred futures are easy to justify while relational or non-instrumental futures struggle to remain intelligible. The contribution is methodological, reframing Design Fiction as a form of methodological exposure that makes visible the future-making work of procedures that are often treated as neutral.

1 Introduction

Computational technologies are commonly framed as solutions to complex societal, institutional, and even existential problems. Faith in technological panacea has a long lineage, described as the technological fix in the 1960s (Johnston 2018) and later as “technosolutionism” (Morozov 2013), the conviction that complex human problems can be solved through computational means. In contemporary innovation discourse, technology is often treated as panacea—an assumed pathway to more efficient, more optimised, and more advanced ways of living. The future, in turn, becomes synonymous with technological development, and progress becomes a matter of implementation.

A defining feature of this logic is its temporal politics. Cheney-Lippold’s (2025) account of a future portrayed as always being on the brink of arrival shows how technological innovation is routinely framed as an inevitable thing “from the future,” thereby narrowing alternative imaginaries. Progress appears as the natural consequence of a given technological advancement, and any suggestion to the contrary is cast as luddism or the product of a laggard mind. For this strain of technological determinism (Héder 2021), the future becomes less a space for contestation than a fixed destination.

These narratives do more than persuade. They shape what comes to feel like common sense. In a Gramscian sense, common sense is not neutral but a product of cultural and institutional mechanisms

Keywords: Design Fiction,
Research Through Design,
Technological Determinism,
Methodological Exposure, Futures,
Design Education.

that make particular circumstances appear as natural and necessary (Gramsci 1971). Educational contexts are among the most significant sites where this socialisation takes place. Consequently, from a Gramscian standpoint, schools and universities are sites of technological indoctrination as well as places where people are shaped as subjects of progress, where ideas of improvement are defined. In this way, educational contexts become “natural” environments for embedding and normalising technological systems, especially those deemed as supportive, inevitable, or crucial for human intellectual development.

At the same time, the future-making work of educational research is rarely addressed explicitly. While research is frequently mobilised to justify particular developments or reforms, the methods through which educational futures become thinkable or plausible often remain opaque. Questions concerning what kinds of futures can be articulated, which ones collapse under scrutiny, and why some of them appear inevitable while others seem unrealistic, are seldom treated as methodological concerns. Instead, following the positivist tradition of social sciences, method is typically positioned as a neutral means of inquiry, rather than as something that actively shapes the horizons of possibility (St. Pierre 2021).

Design education has a privileged position in these circumstances. As a field concerned with making, imagining, and intervention, it is frequently tasked with engaging the future directly through speculation, prototyping, and scenario-building (Koskinen et al. 2011). Yet, design education is itself embedded within institutional and research frameworks that privilege feasibility and demonstratable value. This creates tension between futures that can be imagined and those that can be articulated within the boundaries of dominant educational and research practices. Some futures travel easily across curricula, assessments, and research outputs, while others are simply ignored or even fail to be imagined in the first place.

When it comes to futuring, Design Fiction (DF) has emerged within design research as a practice for engaging these and other tensions. Often associated with speculative or critical design, DF uses fictional, yet plausible artefacts, or “diegetic prototypes”¹ to explore the implications of technologies and social arrangements (Bleecker et al. 2023). DF is commonly understood as a way of materialising or visualising plausible near-future scenarios to guide decision-making in the present (Bleecker et al. 2023). When taken up this way, its value is often assessed in terms of provocation or critique. However, less attention has been paid to how DF might be used to examine the conditions under which futures are conceptualised in the first place.

1. A diegetic prototype is a speculative artefact that exists within the narrative world of a design fiction, where it is presented as an ordinary, functioning object. By appearing as already embedded in everyday life, it allows audiences to encounter a possible technology through use, context, and social meaning rather than as a formal proposal or prediction. The term was coined by David A. Kirby (2010) to describe how films situate imagined technologies within story worlds and was later developed by Julian Bleecker (2009) to describe how fictional artefacts can also be used to prototype cultural adoption and lived experience.

Consequently, this paper regards DF differently. Rather than using it to imagine and analyse educational futures, DF is used as a *reflective practice* that exposes and triggers critiques about how futures are already being shaped. Therefore, the focus is not on what futures should be adopted or avoided, but on how procedural logics, such as feasibility, legitimacy, and coherence operate in the background of research and pedagogical practices by stabilising particular futures while narrowing others.

The paper reflects on a series of diegetic prototypes developed as part of a doctoral research project on futures in design education. The artefacts take the form of short promotional videos for a fictional Master of Design programme and deliberately adopt the tone, tropes, and conventions of contemporary higher education marketing. Rather than analysing these prototypes as representations or critiques in themselves, the paper examines the process of designing them, highlighting moments when certain futures felt easy to articulate, when others became impossible to sustain, and when internalised expectations about what “made sense” shaped design decisions.

The paper’s main contribution is methodological rather than prescriptive. It does not argue for a particular future for design education, nor does it position design fiction as a method to be applied within educational research. Instead, it argues that DF, when situated within Research through Design (RtD), can function as a form of methodological exposure by making visible the often-unexamined procedural logics through which futures (in this case, educational) are considered intelligible, credible, or unattainable. By exposing these logics, the paper invites a shift in how futures are approached in educational research. Instead of asking what futures should be designed, the paper encourages examining how technological determinism shapes the conditions under which certain futures appear inevitable.

2 Background

This background section positions futures in design education not as things to be designed or predicted but as outcomes of ongoing ontological, pedagogical, and methodological practices. It is within this context that the paper turns to DF—not as means of proposing or critiquing alternative futures, but as a practice capable of making visible the often-overlooked role of method in the production and normalisation of educational futures.

Institutional and popular discourse often frame design as a creative and solution-oriented activity capable of addressing complex issues through innovation and ingenuity (Tonkinwise 2018). In such accounts, design is portrayed as broadly accessible and inherently positive—something that can be readily applied and transferred across domains. These framings tend to foreground design’s capacity to generate attractive and timely solutions. However, they also tend to disregard the long-

term consequences of design interventions and the circumstances and constraints in which designers operate.

In contrast, critical design scholarship approaches design as a form of world-making with deep ontological consequences. From this standpoint, design does not respond to existing situations but participates in shaping the material, social, and symbolic conditions through which particular ways of imagining the future come into being. As Anne-Marie Willis argues: design is recursive; “we design our world, while our world acts back on us and designs us” (Willis 2006, 70). This formulation foregrounds the idea that design contributes to the production of realities that, over time, come to feel normal or inevitable. Crucially, this world-making is not only conceptual but ethical in its effects. According to Verbeek, when technologies co-shape human actions, designers of said technologies are effectively doing “ethics by other means,” since design decisions materialise certain possibilities for acting (Verbeek 2006, 369).

Regarding design as an ontological practice has implications for how futures are approached in design education. While futures may be articulated through speculative projects or visionary discourses, they are also steadily produced through everyday pedagogical practices, institutional policies, and disciplinary norms. Design education, as it has largely developed within Western modernist traditions, has been shaped by Western assumptions about progress and improvement. These assumptions are embedded in how design problems are framed, how learning is structured, and how outcomes are evaluated, often positioning the designer as someone who can shape preferable futures through the application of appropriate methods and tools. Read through Verbeek’s (2006) account of mediation, this is not simply a matter of teaching students to design “responsibly.” It is also crucial to recognise how design education trains future designers to participate in the shaping of conduct and values, often implicitly, through the artefacts and systems they learn to produce.

In recent years, alternative orientations within design scholarship have challenged the notion that design should be guided by a monist, universal vision of progress. Arturo Escobar’s (2018) contribution of “designs for the pluriverse” acknowledges the coexistence of multiple worlds and ways of being and knowing. Thereby, drawing attention to the limits of design approaches grounded in Western epistemologies of abstraction, standardisation, and control. Rather than treating difference as a problem, pluriversal design emphasises relationality, situatedness, and the sustaining of multiplicity (Escobar 2018). Pluriversality is not framed as an expansion of options within an existing system, but as a challenge to the ontological assumptions that structure what design is understood to be and do.

Within design education, these pluriversal concerns have intersected with growing attention to care, responsibility, and relationality. Scholars have argued for pedagogical approaches that foreground reflection (Schön 1983), uncertainty (Ajjawi et al. 2025; Gravett 2025), and dialogue (Gravett 2025; Orr and Shreeve 2017) that resist reducing design

education to a rehearsal of producing market-ready solutions or acquiring a set of transferable skills. The design studio, curriculum design, and assessment practices can be understood as spaces where ways of being a designer are cultivated and where futures are implicitly rehearsed. In this sense, design pedagogy has consequences beyond what students learn, as it shapes what kinds of futures come to appear meaningful or achievable through design practice.

At the same time, these pedagogies are practiced under broader political-economic conditions that place constraints on what can be articulated or sustained in educational practice and shape the wider institutional logics through which futures come to be framed. The history of futures studies situates its modern Western emergence in the postwar rationalisation of futures through technological forecasting and strategic planning, informed by intellectual traditions such as systems thinking, before its further industrialisation through business uptake and its more recent employment for neoliberal foresight practices. (Son 2015). This heritage is distinctively instrumentalist as futures studies has become “a mere strategic tool of management planning” (Son 2015). In contemporary corporate contexts, futuring practices are often employed to legitimise predetermined technological roadmaps rather than open genuine speculative space (Ringfort-Felner et al. 2023).

A comparable logic is evident in the contemporary neoliberal university. Functioning in corporate style, the neoliberal university favours practices that end up commodifying knowledge and privileging measurable outcomes and demonstrable returns at the cost of educational values (Troiani and Dutson 2021). Subsequently, futures that favour technological optimisation to achieve better scalability and measurability align naturally with institutional imperatives, while relational or care-oriented futures struggle to assert their value. While relational and care-oriented futures are not explicitly rejected, they are overlooked or marginalised because they sit uneasily with dominant modes of organising knowledge and practice (Ansari 2025; St.Pierre 2021).

It is precisely this tension between futures that motivates the methodological approach of this paper. Rather than assuming DF can automatically generate critical distance, the study treats the design process itself as a site of inquiry. Through attempts to articulate educational futures within the constraints of the promotional video archetype, the research exposes how institutional logics operate from within, shaping what feels plausible and what collapses under scrutiny.

The observations made during the study point toward the role of method in shaping futures within design education and educational research. Methods are commonly treated as neutral tools for inquiry, evaluation, or improvement (Law 2004; St.Pierre 2021), even though method has long been contested as a universal foundation for inquiry (Feyerabend 1975). Methods play a central role in determining what kinds of questions can be asked, what counts as evidence, and which futures appear plausible or legitimate (Ansari 2025). In futures-oriented contexts, method itself participates in world-making, as it shapes the horizons of possibility within which design education operates.

3 Design Fiction as Research Through Design

DF is a practice within design research that uses diegetic prototypes to explore the cultural and social implications of emerging technologies and practices (Bleecker et al. 2023). Rather than predicting or proposing futures, DF operates through proximity and exaggeration, creating recognisable scenarios that feel connected to the present while remaining clearly speculative. Its critical force does not lie in offering solutions but in making current assumptions about a given future visible. DF can also function as a way for interrogating how futures are currently being portrayed and justified.

This paper uses DF for RtD, treating design practice as a mode of inquiry rather than a means of producing solutions or validated outcomes. Building on Frayling's (1993) influential account of research *for*, *into*, and *through* art and design, RtD frames making as a legitimate route to knowledge production. Findeli et al. (2008) further clarify RtD as project-grounded research that aims to be both rigorous and relevant, without collapsing the research project into the design project. RtD foregrounds making as a way of thinking, allowing questions to be explored through material and visual engagement rather than resolved in advance (Galdon and Hall 2022). Knowledge is generated through reflection on the design process, the artefacts produced, and the conditions under which particular design decisions become possible or constrained. Therefore, the artefacts produced by this research are treated as sites of inquiry rather than outcomes.

The diegetic prototypes discussed in this paper consist of a series of short videos created by the first author in the form of promotional media for a fictional Master of Design programme at a fictional university. On surface level, the videos resemble familiar higher education marketing content. They adopt an upbeat tone, use generic imagery, and draw on the language of innovation, efficiency, and opportunity, commonly associated with start-up culture and technology-driven educational reform. These conventions were deliberately adopted for plausibility. By exaggerating existing discourses while remaining plausible, the videos were designed to sit uncomfortably close to the present.

Crucially, these artefacts are not presented as speculative proposals or predictions of a future to be adopted or avoided. They are not evaluated in terms of feasibility, effectiveness, or desirability. Instead, they function as design fictions in a critical sense, suspending the question of implementation to highlight assumptions and logics through which futures become intelligible. Their purpose is not to argue for or against a particular future, but to make visible the criteria by which futures are rendered coherent, reasonable, or inevitable.

Within this research, DF is used as a probe to critique method. The process of designing the videos—choosing language, imagery, narrative structure, and implied pedagogical arrangements—surfaced moments where some futures became easier to articulate than others. Decisions about what could be exaggerated without breaking plausibility, what needed to remain implicit, and what risked appearing implausible re-

vealed underlying expectations about efficiency, automation, creativity, and value in design education. Rather than depicting a future state, the artefacts exposed the conditions under which futures are made legible.

DF also operates here as a form of disturbance through the absurd. By amplifying familiar logics rather than opposing them directly, the videos produce moments of discomfort through proximity rather than shock. Practices that are often framed as incremental or benign, such as the outsourcing of knowledge work to automated systems, the optimisation of learning processes, or the transactional framing of education, become more visible when taken to their logical extreme. The futures depicted in the speculative artefacts are unsettling precisely because they remain continuous with existing institutional rhetoric.

Simultaneously, DF functions both as a reflective device and methodological component within the research process. Questions of coherence, relevance, and legitimacy repeatedly surfaced during the act of designing the videos, highlighting how methodological expectations exert pressure on speculative work even in the absence of evaluation or implementation. Reflection was therefore not confined to a retrospective analysis of the artefacts but deeply entangled with the design process as it unfolded.

4 Reflective Analysis of Design Fiction Artefacts

Before detailing reflection-on-action, it is useful to briefly situate the artefacts that anchor the analysis. The artefacts are a series of short DF videos produced in the style of a university advertisement, using techno-optimistic language, upbeat corporate background music, and general aspirational imagery. They promote a fictional postgraduate design programme where AI tutor bots replace most of the faculty, and students are encouraged to outsource design work to generative systems.

Figure 1 shows a still from one of the videos.

Fig. 1. Screenshot from a Design Fiction video modelled on institutional promotional media, introducing a GenAI-led design programme. A viewing link is available upon request from the first author.



This section reflects on what became visible through the process of designing the diegetic prototypes. The analysis focuses on moments in the design process where certain decisions felt straightforward while

others became difficult or unstable. In the context of this analysis, references to method do not refer to the RtD methodology guiding the study, but to the procedural logic and criteria through which educational futures are legitimised in practice.

4.1 Futures That Felt Obvious or Inevitable

One recurring moment in the design process involved deciding how the fictional design programme would justify itself. Framing the programme around efficiency, personalisation, and optimisation required little deliberation. Claims about AI tutors improving learning experiences or streamlining educational processes— “Design’s brightest minds, one prompt away”—could be scripted easily using familiar institutional and techno-optimist language. These claims felt immediately plausible, not because they were persuasive or desirable, but because they aligned with established ways of accounting for value in higher education.

This ease pointed to a procedural logic in which educational futures are expected to demonstrate efficiency, improvement, and measurable benefit. Futures that align with these criteria do not require extensive justification and can simply be stated. The design work thus revealed how certain educational futures are already pre-aligned with dominant modes of legitimisation, making them appear obvious or inevitable without explicit argument.

4.2 Futures That Became Implausible or Collapsed

In contrast, other futures proved difficult to sustain within the archetype of promotional media. Attempts to articulate relational, slow, or non-instrumental forms of learning, such as those centred around uncertainty, shared inquiry, or forms of education not easily measured or captured by credentials, proved difficult to make credible within the same archetype. These elements often felt awkward within the promotional format, requiring additional explanation or justification that risked breaking the artefact’s plausibility.

Notably, potential implausibility of the artefact was not a matter of personal preference or aesthetic discomfort, but of misalignment with dominant evaluative criteria. For example, futures grounded in relationality or non-instrumental learning struggled to find a stable foothold within the fictional near future scenarios. Their fragility highlighted how certain forms of education, while not explicitly rejected, become marginal because they do not conform easily to the structures through which educational futures are typically communicated and, importantly, judged.

4.3 Procedural Logic as an Internalised Constraint

Across the design process, procedural expectations operated less as explicit rules and more as internalised constraints. Even in the absence of evaluation, implementation, or external judgement, decisions

were shaped by concerns about recognisability and credibility. The artefacts needed to resemble something that could plausibly exist within a near-future university, and this requirement narrowed the space for speculation.

Internalised constraints originated from first-hand experience designing curricula and from larger institutional and cultural discourse about what educational futures should look like to be taken seriously. Consequently, DF exposed how procedural logic functions from within practice, shaping what can be exaggerated, questioned, or left unsaid.

Taken together, these three reflections suggest that the diegetic prototypes functioned less as depictions of futures and more as sites where the criteria governing educational futures became visible. Therefore, we assert that the value of the work lies in how the design process surfaces the often-unexamined logic through which futures are rendered plausible, legitimate, or dismissible. It is this activity of surfacing that informs the discussion that follows.

5 Discussion

Analysis of the diegetic prototypes' design process suggests the significance of DF in this study lies less in the future scenarios it depicts than in what the process made visible about our current near-futures already shaped by dominant modes of legitimisation. Rather than functioning as a speculative proposal or a critique aimed at persuading an audience, the prototypes operated as a site where the procedural logic governing educational futures could be encountered directly. Thus, the role of DF shifts from imagining near-future scenarios to exposing the conditions under which certain futures become intelligible, credible, or dismissible in the first place.

This distinction between imagining and exposing matters. Educational research often treats futures as entities to be evaluated or improved, while not examining the logic through which those futures are rendered plausible. In the case of the DF videos, futures organised around optimisation, automation, and efficiency aligned easily with familiar institutional forms of justification, while futures grounded in relational or non-instrumental forms of education struggled to remain coherent within the archetype. These dynamics did not arise from explicit ideological commitments, but from internalised expectations around legitimacy and recognisability. DF, as used here, exposed these expectations.

Framing DF as methodological exposure also clarifies its relationship to RtD. RtD provided the methodological orientation for the study as a way of thinking through making, where insight emerges from reflective engagement with practice rather than from validation or generalisation (Galdon and Hall 2022). DF, within this approach, was not a method applied to educational research, but a practice through which the future-making effects of procedural logics could be made visible. In this sense, DF did not introduce speculation into the research process.

Instead, it revealed how speculative judgements were already embedded in the criteria that shape educational futures.

Discovering DF's revelatory capacity is a key contribution of this research with implications for debates on ontological design and pluriversality in design education. If design and education are understood as world-making practices (Willis 2006), then research and pedagogical routines must also be recognised as participating in the production of futures. The analysis suggests that pluriversal futures may not be excluded through overt rejection. Instead, they are narrowed through procedural logics that privilege certain forms of value, accountability, and sense-making. Futures that do not align with these logics may remain conceptually desirable yet become dismissed as difficult to articulate or justify within dominant research and institutional frameworks.

From this viewpoint, calls for care, relationality, or plurality in design education risk remaining overlooked if the procedural conditions under which research and pedagogy operate are left unexamined. The contribution of this study lies in acknowledging DF's capacity to make those conditions visible. By amplifying familiar logics rather than opposing them directly, the analysed artefacts exposed how deeply these logics are internalised even within speculative and critical practice.

Rather than positioning DF as a neutral or transferable method for educational research, this paper asserts its affordance as a situated reflective device that can operate within specific research contexts to surface assumptions that might otherwise remain hidden. In this way, DF creates conditions for reflexivity, allowing researchers to attend to how futures are shaped through the practices they employ.

6 Conclusion

This paper has argued that DF is a practice that exposes the procedural logics through which educational futures are produced and normalised. Through a reflective RtD engagement with the process of designing diegetic prototypes, the study demonstrated how certain futures became easy to articulate. Whereas, other futures struggled to remain coherent, not because of explicit intentions or values, but because of internalised procedures and criteria for plausibility and legitimacy.

The paper provides a methodological perspective on the shaping of futures within educational research and design education practices by treating DF as a situated reflective device. Additionally, it makes an ontological contribution by identifying an affordance of DF that has not yet been examined by design research. We are not asking which futures should be pursued but calling for greater criticality to be applied to how futures come to appear inevitable, reasonable, or excessive through the everyday practices of research and pedagogy. In doing so, it asserts the DF method as an epistemic orientation, in addition to technique, for creating space for futures that are otherwise foreclosed.

Statement on AI Use. The artefacts the submission critically discusses were created using iMovie, Adobe InDesign and Adobe Illustrator. Some portions of the artefacts' scripts were generated using ChatGPT-4, a large language model from OpenAI. Voiceovers in the artefacts were generated using NaturalReader, an AI text-to-speech tool.

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