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Entangled Networks: Metaphor as Method, Matter, and Media

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Abstract

This article examines how metaphors operate in digital media not as descriptive analogies but as structuring forces that shape how technologies are designed, understood, and inhabited. Building on Marianne van den Boomen's theory of digital material metaphors, it argues that metaphors such as the "desktop," "cloud," and "frontier" encode social and ideological assumptions into the infrastructures of computation. These metaphors render digital systems legible while concealing not just the procedural computation that van den Boomen terms depresentation, but the material, ecological, and labour conditions that sustain them. Using my practice-based work *c(o)racle*, 2025, as a case study, the internet is explored as a metaphorical and material terrain that connects networks of data, water, and craft, interrogating the dominant metaphor of cyberspace as immaterial and untethered, in dialogue with Tim Ingold, Lakoff and Johnson, Henri Lefebvre, and Yuk Hui. Drawing on S. J. Tambiah, Bruno Latour, and Elizabeth Wayland Barber, the essay situates metaphor within broader histories of making and mediation. By activating metaphor as both method and medium, the study proposes a critical reorientation toward digital space as an entangled, situated, and contested environment.

Keywords: material metaphor; digital media; network; cyberspace; artistic practice

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1. Introduction

In digital technologies, metaphors are more than cross-disciplinary shorthand, useful for orienting users; they are structuring mechanisms that shape how technologies are designed, understood, and inhabited. This transference is not only conceptual but material: metaphors carry with them social, cultural, and political weight, encoding ontological assumptions into the architecture of digital systems. As Marianne Van Den Boomen asserts, "Metaphors are thus matters of transference in the broadest sense; a blend of transport, translation and transformation" (Van Den Boomen 2014, p. 51). Digital metaphors, like that of the desktop interface, the cloud, forums, and folders, do not simply represent digital objects; they constitute them, rendering abstract processes legible, while simultaneously concealing their complexity.

This essay examines how metaphors operate within new media, not as static analogies, but as dynamic forces that shape technological design, user interaction, and sociopolitical imaginaries. Utilising Van Den Boomen's theory of digital material metaphors, it investigates how metaphor operates across different registers, embedding ideology within interface and infrastructure. Building on Lakoff and Johnson's Contemporary Theory of Metaphor (Lakoff and Johnson 1980), Van Den Boomen repositions metaphor from the cognitive and linguistic to the technical and ontological. This essay explores the spatial

metaphors of the internet, particularly the metaphor of cyberspace as a frontier, to consider their entanglement with narratives of colonization and commodification. Such metaphors, while seemingly benign, often 'depresent' the material and ecological conditions of digital life. This paper extends her analysis through artistic perspectives, drawing on S. J. Tambiah's notion of the 'magical power of words' (Tambiah 1968), where language and action converge to effect material transformation.

Through a case study of my own artistic practice, this essay considers how artistic methods can expose and reconfigure these hidden metaphorical logics. The artwork *c(o)racle* engages with digital, ecological, and craft-based networks to explore the metaphor of the internet as terrain; the interranet. In doing so, it aims to materialize the otherwise obscured infrastructures and social relations embedded in digital systems. *c(o)racle* also situates metaphor within the long history of craft and technology, following Elizabeth Wayland Barber's argument that textile practices were among humanity's earliest technologies; forms of making that entwined material knowledge, labour, and survival (Wayland Barber 1995). Likewise, Bruno Latour's critique of technological modernity highlights that tools are never neutral instruments but mediators that hybridise nature and culture (Latour 1991). In this light, craft and computation share a lineage: both are systems through which humans materialise thought, pattern, and relation. By activating metaphor as both method and medium, the work proposes a critical reorientation, one that reimagines digital space not as a frictionless frontier, but as a situated, entangled, and contested terrain.

2. Theoretical Framework: Metaphors in New Media

Marianne Van Den Boomen's 'Transcoding the Digital: How Metaphors Matter in New Media' (Van Den Boomen 2014) studies the epistemological and ontological significance of metaphor in the construction and operation of digital technologies. Metaphors in digital media, she argues, are not abstract ideas; they are deeply embedded within socio-technical systems and exert tangible, operative effects. They do not function solely at the level of language, digital metaphors organize and inform the architecture of technology, shaping how interfaces are designed and how users interact with them. As such, they are material forces that condition both the symbolic and the functional layers of computation.

Metaphors are woven into the fabric of computational understanding, necessary for users and designers to navigate the nested complexity of digital systems (Van Den Boomen 2014). Initially, we might think of digital designs, like that of the desktop, and trashcan, as simply skeuomorphic. Where familiar design is used to derive new objects and their organisational logics in order to invoke familiarity and quick acclimatisation.

However, Van Den Boomen evidences how metaphors run deep into the code of digital spaces and are necessary in our understanding of its function. The Graphical User Interface (GUI) is a good example of this; files and folders on a desktop are representations of complex patterns of binary numbers, which themselves are abstractions of machine states. Binary digital code is "...in fact an analogical mapping of the machine state as expressed by the levels of the numerous tiny voltage circuits on the microprocessors (chips) inside the machine" (ibid., p. 29). Therefore, we use and operate nested metaphors: "A computer is a representation multiplier, increasing its complexity with every level of interfacial legibility" (ibid., p. 31). Importantly, metaphor is necessary even for the very existence of digital objects; "Interfaces, programs, data objects, and files are not first there and then we make them comprehensible by importing metaphors from elsewhere—these very differentiations only exist through metaphor. Metaphor is what makes them legible, articulated, delineated, operative and operable" (ibid., p. 32).

Digital metaphors also function through a process of depresentation (ibid.), where complex technical operations are hidden behind simplified visual icons. The desktop

metaphor encourages users to interpret icons literally, as if they were actual documents or folders, concealing the underlying material and procedural complexity. "The icons on our desktops do their work by representing an ontologized entity, while depresenting the processual and material complexity involved. . . this is why we are seduced, indeed compelled, to take icons literally, at interface value" (ibid., p. 36). The success of these metaphors depends not on direct one-to-one mappings, but rather on what they hide- the invisible processes involved, in sending an email, for example, which metaphorically recalls mailing a letter. The depresented parts are not the elements of the metaphor that do not map, like the lack of stamps in the email process, but rather the programming a user could not read that enable it to function. ". . .the icon is a two-faced Janus: one side is directed towards the user, who must be able to read, understand, and operate it, and the other side is directed towards software and machine processes. the user is able to read the icon precisely because the other side is concealed and depresented, blackboxed." (ibid., p. 46). This entanglement of metaphor, sign, and tool is central to how digital systems operate.

Conceptual metaphor theory, developed by Lakoff and Johnson (1980), underpins this understanding. It is the prevailing contemporary understanding of metaphors and comes from the literary field of research. Known as the Contemporary Theory of Metaphor (CTM), it holds that metaphors are part of human cognition, communication, and perception. They allow us to express abstract ideas, such as time, causality, or happiness, through more concrete forms. Van Den Boomen adopts this conceptual foundation but redirects it toward the domain of digital media, where metaphors are not only cognitive or linguistic but also operational and material. However, she argues, that the CTM alone cannot fully account for these dynamics, since it tends to treat metaphors as mental mappings rather than as technically embodied mechanisms. Van den Boomen's analysis therefore extends the conceptual model into what she terms icontology, a study of how digital sign-tools, metaphors, and materialities co-constitute each other.

This perspective finds antecedent in S. J. Tambiah's seminal 1968 lecture on 'The Magical Power of Words' (Tambiah 1968), itself a reflection on Malinowski's study of Trobriand magic. Tambiah proposed that words are not passive symbols but active agents: "Since words exist and are in a sense agents in themselves which establish connexions and relations between both man and man, and man and the world, and are capable of 'acting' upon them, they are one of the most realistic representations we have of the concept of force which is either not directly observable or is a metaphysical notion which we find necessary to use." (Tambiah 1968, p. 184). For Tambiah, word, deed, and action are inextricably linked within a unified system of meaning and effect. His analysis distinguishes between metaphor, grounded in similarity or transference, and metonymy, grounded in contiguity or material connection. The "rite of transfer," he writes, "portrays a metaphorical use of language (verbal substitution) whereby an attribute is transferred to the recipient via a material symbol which is used metonymically as a transformer" (ibid., p. 194). In such ritual practice, metaphor and metonymy converge: a symbolic operation becomes efficacious through its material enactment.

This convergence provides a suggestive analogue for digital mediation. Just as Tambiah's "magical" words act through both symbolic and material channels, digital metaphors operate simultaneously as conceptual mappings and technical mechanisms. The metaphor is not only about something but does something, it configures relations, actions, and perceptions within the digital environment. In this sense, Van Den Boomen's digital material metaphor theory reveals a continuity between anthropological understandings of language as performative force and contemporary digital systems, where metaphor becomes a structuring principle of both meaning and material operation, between the orders of language (signs) and being (tools). As van den Boomen asserts: "How can such an ontological gap

be bridged? I would argue that such a jump can only be accomplished by the bridging and mediating labor of metaphors." (ibid., p. 43).

Van Den Boomen's work builds on both media theory and anthropology to expand this ontological gap of sign and tool within a socio-cultural context. Drawing from Katherine Hayles' media-specific analysis and anthropological perspectives on objects, material metaphors are defined by their capacity to organize social meaning through their material inscriptions. It is not an object whose function is a sign (like a traffic light), nor is it an object functioning as a metaphor (she uses the example of a salt-shaker being used in place of a car, or perhaps footballer, in a story told around a table with friends). Instead, "A material metaphor is a social-cultural object that enacts its material design and inscriptions in a special way: it condenses, enforces, enables, inscribes, assigns, and performs social meaning and organization" (Van Den Boomen 2014, p. 65) Using the example of a flag or a wedding dress, these material metaphors have the important function of materialising social relations.

A digital-material-metaphor is thus something that actively performs social meaning in a digital context. Remembering too that digital tools and systems cannot exist outside the metaphorical structures that give them form. Common examples of digital-material-metaphor include interfaces designed around metaphors borrowed from architecture (e.g., windows), commerce (e.g., shopping cart), social interaction (e.g., forums), or labour roles (e.g., server). There are digital space specific logics that only exist in this suspended metaphorical space: "On the internet a portal consisting of pages, buttons, archives, movies and rooms is quite common, one rarely gets confused by such a heterogeneous and internally conflicting assemblage of metaphors." (ibid., p. 62). Like a hyperlink or Facebook friends, digital metaphors symbolically condense and enforce social meaning through their designed form.

Material metaphors thus offer critical apertures into the digital black box. They are "heuristic devices for critical deconstruction," or "epistemological hacking tools" (ibid., p. 71), which offer us opportunities to trace the complex entanglements of technical systems, social structures, and cultural meaning.

In this context, Lev Manovich's concept of transcoding offers a useful framework for understanding the movement of metaphors across domains. Transcoding refers to the exchange between the cultural layer and the computer layer, where cultural forms are restructured through computational logic. The term itself is borrowed from computing and signals this metaphorical transformation. As Manovich explains it, "a blend of human and computer meanings, of traditional ways in which human culture modelled the world and the computer's own means of representing it" (Manovich 2001, p. 46). The most prominent example of this is the shift from narrative to database as the dominant cultural format. Transcoding, however, also implies that no transformation is ever lossless: when a digital format is converted into another, certain affordances are lost while others are gained (Van Den Boomen 2014). This process highlights the deeper cultural and semiotic implications of digital infrastructure, where metaphors are not only migrated but operationalized in the code, the interface, and the very logic of the systems we inhabit.

If we think of the 'window' metaphor in digital technologies, we see a design that intends to mediate and create a bridge to connect different domains. We 'look-through' the window, not aware of the impact of its framing. Through the depresentation of the function of the code, the cost of its translation—its transformation is hidden: "The Greek prefix meta means 'after, over, across', but also 'changed', whereas pherin in Greek means 'to bear, to carry'. Metaphors are thus matters of transference in the broadest sense; a blend of transport, translation and transformation" (ibid., p. 51).

These meditation metaphors (window, platform, forum) create a sense of immediacy that makes the medium itself invisible. "It is the ultimate metaphor of transparent immediacy—as if seen through a window—and its power lies precisely in the implication that the underlying mechanism is none of your business as a user." (ibid., p. 77).

My practice, which I will introduce as a case study of artistic practice, seeks to point out the material impact of those intangible interfaces using metaphor to examine the medium itself.

3. Internet as Frontier

These digital logics which allow for frictionless immediacy, can nest contradictory metaphorical symbols and which bear little relationship to the material world that enables their existence are suspended in the landscape of cyberspace. Since its inception, the internet has been conceptualized through spatial metaphors that imagine digital networks as a form of territory. Terms such as 'cyberspace', 'hyperspace', and 'electronic frontier' have contributed to public perception and policy discourses, positioning the digital as a new terrain for exploration, colonization, and commodification. These metaphors have not only influenced the way users navigate and understand digital environments, but they have also framed broader sociopolitical narratives about sovereignty, identity, and governance online.

For Tim Ingold, the term 'space' carries an abstract and detached connotation, one that renders it empty and divorced from lived reality. In his theory of the 'logic of inversion', Ingold describes how within modernity and its modular logics, the pathways along which we live become transformed into boundaries that enclose life. The result is the creation of 'places' in which we reside, suspended within an otherwise boundless and empty 'space'. (Ingold 2011) This is particularly interesting when considered in relation to cyberspace, the metaphorical terrain of the internet. Here travel through the network is destination oriented and imagined as point-to-point connectors suspended in the 'nothingness' of space. Users navigate it as "self-contained, bounded individuals", (ibid., p. 151), mirroring the modern conception of space as an external void through which discrete subjects move. This inverted logic is at odds with lived experience, in which humans are in fact wayfarers, travelling along (not across) lines of existence—creating in the process place-binding, rather than place-bound lives, but it is necessary to create the illusion of boundless frontier that sustains extractive capitalism.

The term cyberspace was coined by William Gibson in his 1982 short story 'Burning Chrome' but became more well-known through his 1984 novel Neuromancer. In Gibson's fiction, cyberspace is defined as a "consensual hallucination experienced daily by billions of legitimate operators" (Gibson 1984, p. 67), a visual and immersive datasphere in which information and interaction are rendered navigable like geographic space. While initially a fictional term, cyberspace was soon adopted as a dominant metaphor for the internet throughout the 1990s. Cyberlibertarian writers such as Barlow (1996) embraced the term to explore the sociocultural and political dimensions of digital life, treating the internet as a borderless realm that offered new forms of community, identity, and independence.

Barlow's influential 1996 'Declaration of the Independence of Cyberspace', published on behalf of the Electronic Frontier Foundation (EFF), offers a clear articulation of this metaphorical imaginary. Addressed to the "Governments of the Industrial World," the declaration asserts: "Cyberspace does not lie within your borders. . . It is an act of nature and it grows itself through our collective actions" (Barlow in Davis 2015, p. 132). In this vision, cyberspace is framed not as a product of technological infrastructure or human labour, but as a naturalized, autonomous domain beyond the reach of physical jurisdiction and material constraints.

This conceptualization draws heavily on the American mythos of the frontier. A myth deeply embedded in national identity and projected onto digital culture. As Erik Davis, who charts the esoteric currents of the early internet in the book Techgnosis (Davis 2015) observes, "America's almost mystical obsession with the frontier. . . plays directly into the early mythology of the internet" (p. 128). In Barlow's EFF declaration, cyberspace becomes a digital version of the settler colonial imaginary: a vast, unregulated expanse awaiting innovation and exploration, implicitly erasing the pre-existing structures, inequalities, and infrastructural realities that are implicit in the construction of the internet. "In Barlow's hands, cyberspace becomes both a terrain and an act of nature, an essentially mythological concept that allows him to construct the Internet as a technological rerun of the borderless (though inhabited) continent that greeted America's early colonists" (Davis 2015, p. 133).

However, this metaphor of cyberspace as immaterial and post-territorial was simultaneously challenged by others who emphasized the material and political embeddedness of digital systems. Poster (2001) highlighted how cyberspace is not detached from material infrastructures but is deeply entangled with global networks of power, labour, surveillance, and capital. Even as it is imagined as a disembodied realm, the internet relies on vast physical infrastructures: data centres, fibre-optic cables, labour forces, and energy systems. What emerges, then, is a critical tension between the ideological appeal of cyberspace as a liberated, post-physical domain and the materialist critique that reveals its embeddedness in structures of inequality, exploitation, and control.

The persistence of spatial metaphors in digital discourse, particularly the metaphor of cyberspace, is as important today as it was at the internet's inception. These terms are not neutral, they shape how digital spaces are constructed, governed, and used. As Van Den Boomen (2014) reminds us, metaphors in digital media are both operative and constitutive, providing the very scaffolding through which digital objects and interactions become legible, actionable, and meaningful. The metaphor of cyberspace, with its frontier logic and denial of materiality, exemplifies the ideological labour metaphors perform in sustaining particular visions of digital life.

This is epitomised in Barlow's 1996 Declaration of the Independence of Cyberspace: "Your legal concepts of property, expression, identity, movement, and context do not apply to us. They are based on matter. There is no matter here" (quoted in Davis 2015, p. 133). As Davis (2015) points out, the belief that "there is no matter here" ignores the realities of digital materiality—the "electronic frontier" was never without matter; it merely obscured the material conditions of its existence (p. 134). This is an example of Van Den Boomen's depresentation of a different kind. The metaphor of internet as vast frontier depresents not only the complex computational function but also the material infrastructure necessary and the interconnected ecological systems that the technology disrupts and destroys. If, however, we adopt Ingold's notion of the wayfarer, we might better understand the nature of digital experience. As Ingold writes,

> "*. . .the wayfarer is instantiated in the world as a line of travel. It is a line that advances from the tip as he presses on, in an ongoing process of growth and development, or self-renewal. As he proceeds, however, the wayfarer has to sustain himself, both perceptually and materially, through an active engagement with the country that opens up along his path.*" (Ingold 2011, p. 150)

To inhabit our digital lives as wayfarers, then, would mean recognising not only the significance of destinations, the sites upon which we 'land', but also our dependence on the material infrastructures that enable connectivity, the ecological systems that sustain them, and the social relations that arise as we move with and through the network. Through this we might imagine a new sort of cyberspace, not as virtual travel-line and destination dot but a meshwork (a term Ingold uses that is borrowed from the philosophy of Henri

Lefebvre) of internet existence as fabric. "For this reason I have found it necessary to distinguish between the *network* of transport and the *meshwork* of wayfaring. The key to this distinction is the recognition that the lines of the meshwork are not connectors. They are the paths *along* which life is lived. And it is in the binding together of lines, not in the connecting of points, that the mesh is constituted." (ibid., p. 152).

Van Den Boomen also references the philosophy of Lefebvre which warns against the "illusion of transparency" and the "realistic illusion," which treat space as either purely intelligible or entirely natural (Lefebvre 1991, pp. 27–30). Instead, Lefebvre argues that all space is a complex mixture of the perceived, the conceived, and the lived. Van Den Boomen applies this to digital media, which challenges the metaphor of space as a static container and instead posits it as a changeable, socially produced and maintained assemblage. Or, as we might assert from the writing of Ingold, as a meshwork of wayfaring. As Van Den Boomen argues, "Space is all too often metaphorized and icontologized as a static container, a box, instead of a dynamic working space that produces its own membranes and dimensions" (Van Den Boomen 2014, p. 85).

So how might we present the hidden dimensions and interrelations? I offer artistic material practice as a potential means.

4. Methodology: Practice as Research

My artistic practice conceptually exists within this spatial internet metaphor. I think of the internet as a living landscape and use my practice to explore its terrain and nested interconnected (metaphorical) e-cologies. I have developed a language to talk about this ecological system—the interranet; internet as terra, as earth; and e-cologies, digital systems and interactions that create various climates. This interranet is a portal opened through language, where disciplinary logics are translated and transformed into digital ontologies and epistemologies. Here metaphor is both method and medium—transference is conceptual and material, mapped from ecological science to digital logics and from digital infrastructural matter to artistic materials and their associated meanings. The *interranet* is a metaphor that aims to challenge the other metaphorical logics that allow us to look through digital windows, rather than critically looking at the frame it creates. To materialise the infrastructural matter that takes the form of complex global logistics, energy and water consumption, the use of minerals and natural resources to create hardware.

Digging down into digital soils, I question whether the interranet has been depleted through capitalist extractivism. Whether this 'new' frontier is suffering a mirror monoculturalism that plagues industrial farming—a monoculturalism of unified globalisation that is accelerating a technological singularity. Philosopher Yuk Hui sees the unilateral force of globalisation manifest in our digital cultures. This monoculture, or singular way of being, has permeated through technological infrastructure.

> "*Navigational and military technology allowed European powers to colonize the world, leading to what we now call globalization. . . In addition to creating new nautical and cartographic tools, the Enlightenment was also itself a process of orientation that situated the West as the center of this transformation, the source of its universalization.*" (Hui 2019, p. 2)

This unilateral force of globalisation has resulted in a unification of the cosmos through technical activities that have synchronised the planet to a global time axis. A pursuit of reason and logic at the expense of all other realities, ecological limits and ethics, made possible, in part, due to digital material metaphors (Van Den Boomen 2014) that shaped public imaginaries and provided immediate connectivity to virtual worlds without consciousness of the ontological frame it produces. Hui's concept of Cosmotechnics provides a way of challenging the assumption that technology is universal and provokes us to reconsider the

relationship between technology, environment and culture. His work questions whether the localised diversification of technologies could dislodge the monopoly of big tech.

> "*. . .escape [the] global time-axis, escape a (trans)humanism that subordinates other beings to the terms of its own destiny, and propose a new agenda and imagination of technology that open up new forms of social, political, and aesthetic life and new relations with nonhumans, the earth, and the cosmos.*" (Hui 2019, p. 7)

This diversification could be interpreted metaphorically as a 'rewilding' of the *interranet*. By inhabiting and tending to the *interranet* with ecological approaches, we might nurture a culture in the soil of the internet, through cultures in networks, technological, social and physical. In the *interranet* I'm using metaphor to counter the all-consuming digital metaphors we've lost ourselves within. Though the medium might be the message (McLuhan and Fiore 1967) we must remember that the map is not the territory (Korzybski and Pula 2005). In other words, though we inhabit the digital sphere where the content is more legible than the construct, we must not forget reality or come to use digital logics to determine ecological limits.

5. Case Study: Artistic Practice as Material-Metaphor

My work, *c(o)racle* (Figure 1), was exhibited at Ikon Gallery in Birmingham as part of the Thread the Loom exhibition, which centered a AVL (computer-assisted) Dobby loom, activated through live residencies and contextualised by its proximity to artworks exploring the intersections of weaving and computation. *c(o)racle* comprises a 10 m length of sublimation printed fabric, with images of Google Earth oceanic screenshots collaged together across its surface, and punctuated by silhouettes of hands, almost invisible in subtly contrasting collaged images; a rush basket, woven into the shape of a coracle, a small portable and ancient boat; and twisted lengths of green and yellow paracord. Suspended from above, the fabric cascades downward, echoing both waterfall and data-stream. Accompanying the textile is a hand-woven rush basket, formed into the shape of a coracle; a small, ancient, portable boat suspended by lengths of twisted green and yellow paracord. The installation is lit with blue-toned filters that radiates from below and around, evoking the eerie, submerged glow of water or the spectral aura of a digital interface.

c(o)racle nests different spatial, computational and ecological metaphors. It visualises and makes tangible the metaphorical entanglements that underpin both computational and ecological systems. Water and data are here treated not only as parallel systems, globally circulating, networked, increasingly privatized, but as metaphorically and materially enmeshed. We talk of data 'flow', of 'streams' of information—the memory of water invoked in the language of data through digital material metaphors (Van Den Boomen 2014). Data threatens to overwhelm us in its increasing magnitude as data-levels rise. The cost of its storage, sometimes of its creation, ripples out to the offline world too, where the increasing energy needed to maintain server's results in melting icecaps. By 2026 data centres that power AI will be the 5th largest electricity consumer in the world. (Bashir et al. 2024)

In *c(o)racle*, this connection between data and water is made manifest in the use of Google Earth images of oceans and large water bodies on the fabric. By embedding recognisable icons from the Google Earth interface, the search bar, layers panel, and Pegman, into the printed textile, these elements aim to make the frame through which we know and observe the digital world visible. The ripstop fabric, which features a grid pattern, echoes the underlying computational logic of mapping and data structuring. The fabric's oceanic imagery alludes to Google's geospatial technologies, while the waterfall-like installation draws attention to the environmental cost of digital infrastructure by mimicking the environments that technology threatens.

Figure 1. Thread the Loom. Installation view, Ikon Gallery 2025. Image courtesy Ikon. Photo by David Rowan.

c(o)racle operates as a critique of the logic of depresentation that underpins many digital systems, where interface metaphors obscure the procedural and material complexity that enables their function. As Van Den Boomen argues, icons and metaphors like the desktop or file folder succeed precisely because they conceal the systems they rely upon, they render computation legible to users by blackboxing the underlying machine states. In contrast, *c(o)racle* seeks to reverse this operation: rather than masking complexity, it foregrounds it. The installation, with its digital glow, seeks to remind the audience of the depresenting window through which they access technology, as precisely that, a framing device. The piece aims to materialise the hidden infrastructures of the internet, both literal (undersea cables, data centres, energy consumption) and conceptual (the flow of information, the commodification of user data), by embedding them within a visual and material encounter.

This approach is further reinforced through the inclusion of traditional craft practices, which serve as both methodological framework and material metaphor within the work. The coracle is a woven basket made of rush (Figure 2). I've been learning basketry from Linda Lemieux, an expert basket maker in Devon and with whom I harvested the rush from the river Isle. This basket has both a networked surface (of rush), tensioned by learning hands. But it also represents knowledge gathered, shared and distributed through a network of crafters and artists. In this way, the coracle is materially connected to both craft and water networks (as a water vessel), but as an ancient tool, it also embodies technology too. The woven rush coracle embodies a process rooted in tactile, ecological engagement, rather than abstract, algorithmic logic. Craft, in this context, becomes an alternative mode of inscription: one that encodes environmental knowledge (seasonal cycles, and interspecies relationships) into material form. The time-intensive, embodied nature of basketry resists the speed and scalability of digital production, offering instead a situated form of making that reveals rather than conceals its networks of dependency. Craft insists on the legibility of labour, material, and process. Harvesting and weaving rush with Lemieux offered an ecological education: understanding the rhizomatic journey of the plant, the seasonal rhythm of its growth, and the environmental consequences of river

management policy. Such embodied making resists the abstraction, speed, and scalability of digital systems, offering instead a slower, situated form of knowledge. As Wayland Barber (1995) argues, the invention of twisted string marked a pivotal moment in human history, enabling nets, snares, and tethers that restructured life and labour. *c(o)racle* reactivates this history, positioning string and weaving as both metaphor and method for understanding contemporary networked systems, not only as tools for survival, but as means of shaping the world and the systems that mediate it.

Figure 2. Thread the Loom. Installation view, Ikon Gallery 2025. Image courtesy Ikon. Photo by David Rowan.

Indeed, our ability to craft the world around us *is* technology. Or as Davis puts it; "Human beings have been cyborgs from the year zero. . . Culture is technoculture" (Davis 2015, p. 14) For Bruno Latour, technology is not mere instrument, it mediates relations between humans and the world, composing new collectives or hybrids of nature and culture. He critiques the modernist allusion that technology can be separated from its social and material entanglements: "The moderns declare that technology is nothing but pure instrumental mastery . . . but we must be careful to not to take them at their word, since what they are asserting is only half of the modern world, the work of purification that distils what the work of hybridizations supplies." (Latour 1991, p. 66) This distinctly modern false separation between nature and culture, between the human/social and the nonhuman/material or technological is akin to Ingold's abstract and untethered 'space' and his notion of the wayfarer as ideological remedy:

> "*For this reason I have found it necessary to distinguish between the network of transport and the meshwork of wayfaring. The key to this distinction is the recognition that the lines of the meshwork are not connectors. They are the paths along which life is lived. And it is in the binding together of lines, not in the connecting of points, that the mesh is constituted.*" (Ingold 2011, p. 152)

Through my practice, I seek to materialise the *meshwork* of enmeshed relations between nature and culture, social and hon-human.

Along the fabric's image, at intervals, there are a series of hands that gesture in different directions. They are hard to spot, as silhouettes, filled with contrasting oceanic imagery. These hands belong to members of the Birmingham Knitting and Crochet Guild, part of a network of groups that meet across the UK to share experience and knowledge, and who guard a historic collection of domestic textiles. I am a member of the Birmingham branch and have benefitted from the shared wisdom and material knowing that the members possess, an extraordinary resource of skills, enthusiasm and belief in the sharing of craft processes. Alongside these are hands from students at the Birmingham School of Art, where I teach, who are part of the Knotty Knitting lunchtime club. I photographed these participants knitting in a photography studio, then later digitally removed the yarn and needles they were working with to expose the gestures of the craft. These 'shapes', made from the outline of each hand, became an interference in the water pattern acting as a visual undercurrent, steering the coracle towards its unknown future. The hands also materialise a metaphor of tactic knowledge and handwork that digital depresentation obscures.

The history of textiles, of handwork and material knowledge is woven into the fabric of digital technologies. This history is predominantly the history of women who for millennia, were required to contribute labour that could be achieved whilst child-rearing and so who wove cloth whilst tending the animals, children and cooking pot (Wayland Barber 1995). From the punchcard system of the jacquard loom to Ada Lovelace's calculation for the Bernoulli sequence of numbers, often considered the first computer program, to the Bletchley Human Computers and ENIAC programmers, women and the crafts they have mastered, have been excluded from the history of digital technologies. "Hardware, software, wetware—before their beginnings and beyond their ends, women have been the simulators, assemblers, and programmers of the digital machines." (Plant 1997, p. 37). The contributions of textile, of crafted knowledge, has been depresented along with the complex computational processes that enable digital material metaphors.

By staging a dialogue between computation and craft, *c(o)racle* questions the politics of how we know, what we value, and how systems, both digital and ecological, are metaphorically framed and materially enacted. It positions craft as an active technology of knowing, capable of reorienting our understanding of digital environments. Through this, the work hopes to offer a reconfiguration of metaphor as operational ecology, not something that makes the digital world comprehensible, but something that makes its hidden conditions knowable, negotiable, and open to re-imagining.

6. Conclusions

To gather the threads this essay has spun: metaphors in digital media are not descriptions or logic bridges; they are active structuring forces that shape how technologies are designed, understood, and inhabited. As Marianne Van Den Boomen demonstrates, digital metaphors operate across all levels; linguistic, visual, procedural, and infrastructural, and carry with them both epistemological and ontological weight. They not only render digital systems legible but also conceal their complexity, depresenting the material and social processes behind their apparent immediacy.

This essay has explored how spatial metaphors, particularly the internet as frontier (cyberspace), depresent technological infrastructure while perpetuating ideological narratives rooted in colonization and extraction. Such metaphors not only shape the design of the interface, but also shape imaginaries, policy, and cultural relationships to digital systems. Yet, these metaphors are not immutable. They can be challenged, reframed, and re-materialized.

My own artistic practice offers one such reframing. Through the metaphor of the *interranet*, the internet as terrain, as earth, I explore a counter-imaginary that resists the illusion

of immateriality and embraces the entanglement of digital, ecological, and social systems. Here, metaphor becomes an operational ecology, capable of resisting dominant techno-capitalist logics and generating new ways of relating to infrastructures, environments, and each other.

In weaving together data, water, and craft as intersecting networks, my piece *c(o)racle* materializes otherwise hidden processes; from the hands that make and remember, to the servers that consume water, to the metaphors that organize. If digital metaphors so often function to depresent, then artistic practice can function to re-present: to make visible what has been blackboxed, to give form to what has been immaterialised, and to ask what other metaphors, and therefore what other worlds, might be possible.

To rewild the *interranet* is to resist digital monoculture, not only ecologically but also semiotically. It is to open up a multiplicity of cosmotechnics (Hui 2017), of orientations, and of metaphors, not just as tools of understanding, but as modes of being and making. The question, then, is no longer whether metaphors matter in digital media, but how we might learn to inhabit, shape, and transform them with greater ecological, cultural, and material awareness.

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