Mediated psychotherapy, transitional space and cybernetic capitalism

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Abstract

My focus is on how psychoanalysis and digital worlds influence each other: how they shape and comprehend each other through the human, the posthuman, various new digital processes and cybernetic agents. Together, they create entanglements of consciousness, affect and unconscious processes that are intricate and wide-ranging. They are intricate, too, by interweaving with psychoanalytic theory, illustrated here through the concept of transitional space. They also interweave with a rich body of contemporary social theory and I draw on Bernard Stiegler's work to show how these extensive bodies of psychotherapy and critical theory relate in important ways to each other. Critical theory is often sensitised to psychoanalysis, but it is also highly critical of the way digital capitalism constructs new cybernetic worlds, the "psychopathologies of cognitive capitalism", as Neidich (2017) terms it. Patricia Clough (2018) describes these developments as "the user unconscious", the other-than-human agencies increasingly at work beyond and below the threshold of human consciousness. I emphasise that practitioners cannot avoid these developments, and I conclude by asking how, as psychotherapists in democratic societies, we best engage effectively and critically with them.

Whakarāpopotonga

E arotahia ana e au te pēhea o te awenga i waenga o te wetewetenga hinengaro me te ao matihiko; pēhea tā rāua hanga, mōhio hoki i a rāua anō mai i te ira tangata, te tangata pohewa, ngā tepe matihiko hou me ngā tūāhua kaiwhakahaere kōtuitui. Piritahi ka puta ake he whīwhinga mauri ora, he ngau me ngā hātepe mauri moe tino uaua tino whānui nei. Ka uaua ake anō hoki ki te rarangahia atu ki te ariā wetewetenga hinengaro, e whakaahuahia ake ana e te ariā atea tauwhirowhiro. Ka taki hono atu anō hoki ki te rahi o ngā ariā hapori o ēnei rā ā ka toro atu au ki ngā mahi a Penara Hiekere kia kitea ai he pēhea te hononga o ngā huihuinga whakaoranga hinengaro matawhānui nei me te ariā wetewetenga ki a rāua anō. I te nuinga o te wā kua taunga kē te ariā matapaki ki te wetewetenga hinengaro, engari e kaha ana ki te whakahāwea i te āhua whakahou mahi ao kōtuitui a te haupū rawa matihiko, arā e ai ki te kī a Nitiki (2017), " ngā arakauwaka haupū rawa". Ko tā Paterehia Karawhe

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(2018) whakaahua i ēnei whanekenga ko te "kaimahi hinengaro moe", ko ērā atu i te ira tangata kaiwhakahaere e rahi haere ake ana te mahi i tua atu i raro iho o te pito hinegaro ira tangata. E whakahau ana au kāre e taea e ngā kaiwhakaharatau te karo i ēnei whanaketanga, ā, i te mutungā ko taku matapaki ki a tātau ngā kaiwhakaora hinengaro i roto i tēnei hāpori manapori he aha te huarahi pai, te huarahi whai hua hai hīkoitahitanga mā tātau.

Keywords: digital; capitalism; Winnicott; Stiegler; cybernetic; transitional object; boundary object.

Introduction

> What seems possible if not necessary is to rethink the human in terms of digital media and computational technologies impacting the relationship of governance, economy, and sociality. (Clough, 2018, p. 76)

My starting point is the mobile phone framed, in this case, as a transitional object. To do so highlights a powerful set of tensions between therapeutic practices and online technologies. Mobile devices themselves represent new boundary objects within therapeutic spaces — boundaried because they mediate between individual users and their access to the vast, instantaneous worlds of the internet. Yet, these very connections to massive global infrastructures raise profound sociotechnical concerns. Contemporary social theorists, often drawing on the transitional object, reveal the sheer toxicity, often hidden, that is inherent in much of contemporary digital capitalism (Featherstone, 2020; Stiegler, 2014, 2018). Neidich (2017) for example, dubs this toxicity as the "psychopathologies of cognitive capitalism." Cognitive capitalism encompasses artificial intelligence (AI), the Internet of Things (IOT), emerging cybernetic futures along with tangible social media, wearable devices and interconnected digital devices. Consequently, the tensions between unconscious processes and digital technologies provide ways to link the individual and the cybernetic within contemporary thought. It is worth emphasising, then, that we are engaging not simply with the personal unconscious nor even the collective unconscious, but the digital and the technological unconscious (Ashraf, 2020; Powell, 2008; Thrift, 2004).

Mobile Transitional Space

The mobile phone has long been studied for the way it shapes intimacy, social identity and attachments across space and time (Farnsworth & Austrin, 2015; Hills, 2007; Hjorth & Lim, 2012). The coming of mobile devices also signalled fluid, multiple, boundaryless interconnection. Mobility is their central feature. Social scientists MacRury and Yates (2016) describe the mobile phone as a "portable extension" of the self, "a powerful metaphor and metonym for thinking about wider and more deep-seated anxieties" (p. 62). Mobiles act as "attachment objects" which, when understood through object relations, demonstrate how subject and object are mixed, like Clough's "user unconscious", in complex and ambivalent ways. Aaron Balick (2010) comments that western cultures, through mobile devices, "have

reinvented the transitional object — only rather than a furry blanket or a teddy bear, it's a smartphone" (n.p.).

Key, here, is emphasising transitional objects and potential space as intrinsically relational and initially dyadic. This enables transitional phenomena, as Winnicott (1971) writes, to become diffused and spread out "over the whole intermediate territory between 'inner psychic reality' and 'the external world as perceived by two persons in common', that is to say, over the whole cultural field" (p. 4). Implicit in Winnicott's formulation is a secure setting within which any potential space can be created, so that impingements and anxiety do not intrude (Dockar-Drysdale, 1950). In an online context, this can be understood as a boundary, with the mobile as a *boundary object*.

As Stoytcheva (n.d.) writes, "A boundary object is any object that is part of multiple social worlds and facilitates communication between them." (p.1) Boundary objects enable "identification, coordination, reflection, and transformation" (Akkerman and Bakker, 2011, p.132). Moreover, "the notion of boundary may be extended to explore their sensate surfaces that contain primitive, pre-verbal, pre-symbolic, and pre-subjective characteristics" (Diamond et al, 2004, p. 31). All the components of potential space are implicit in this description. Digital devices operate, then, as boundary objects to enable conscious and unconscious communication between participants.

In practice, these boundaries are dynamic, mobilised through text, audio and video, each with multiple communicative functions. As a simple example, the phone acts as a booking or communication device for a therapist, operating just as the therapy door or waiting room has long done. Each necessarily carries its own sensate or symbolic meanings.

The same sensate and symbolic meanings apply across mobile devices, software and apps. Recent studies of Zoom and audio-visual platforms describe how, for instance, they do so in relation to the shaping of meaning across timespans or over space, none of which was anticipated in the face-to-face context (e.g. Cataldo et al, 2021; Isaacs Russell, 2021; Karl et al, 2021; Zhang et al, 2013). This may include how the therapist is placed onscreen, the client's background or visibility, the quality of audio, whether recording is taking place, anxieties about confidentiality (Churcher, 2017), or how interruptions, delays and breakdowns shape interaction (Gordon et al, 2021). Each is crucial to the generation of meaning, intimacy and security. Each is also a *mediated* experience, one in which the generation of social interaction is subtly or crudely translated through the cameras, microphones, screen density, processor speed, or network stability. Valeria Corbella (2020, p. 4) draws on Bleger's (2017) writing to characterise all these as background aspects, non-processes, of the online setting. Yet, it is clearly a broader phenomenon. "Setting" implies a stable stage or staging; in practice, mediated interaction is closer to an exchange of every dimension, mediated and interactive. It encompasses both therapist and client before, during and after the interaction. Equally, it is part of a continuum for both parties, whose ongoing digital lives interlace social media, internet and search engine usage, Twitter activity and much else, which can potentially alter therapists' privacy, for example, in ways rarely experienced before online worlds were created (Ralston, 2021). In the digital context, mediation is an ongoing experience, not simply a setting, one closer to the immersion of swimming or breathing.

It matches online therapeutic experience: the changing locations of a device (bedroom, car, outdoors), the client's social context or the unexpected presence of other participants,

whether human or animal (the crying baby, cat on screen, dog's woof in the background). Each element carries its own set of fluctuating dynamics around intimacy, distance, exposure, vulnerability, gesture, misinterpretation and much else, each of which feed into the unconscious components of a session (Chherawala and Gill, 2020).

What these all suggest, however, is how critical the mobile is as a boundary object to sustain the delicate experience of online potential space. For instance, Churcher (2017) outlines how the very instability of digital settings may actively shape, or provoke, unconscious processes. He suggests, citing Bleger (2013), how a psychotic part of the personality can be "quickly and quietly deposited in the setting, where it remains as part of the 'non-ego', hidden and unanalysed, until a disruption of some kind causes it to become manifest" (Churcher, 2017, p. 5). As indicated, online disturbances can readily bring such material to the foreground.

Mediation, across devices, opens up several possibilities simultaneously. It provides a current horizon of discussion about online therapeutic work (Scharff, 2019, 2020). It moves seamlessly between dyadic and collective interaction (tweets, group messaging, project management software such as Monday.com). It also blends collective and aural mediation, as cultural studies scholar Malcolm James highlights. In *Sonic Intimacy* (2020) he traces how "intimacy and co-presence were created, nurtured, and maintained", unexpectedly, within the practices of jungle pirate radio (Kim, 2021). These diasporic cultures, through specific genres, sustain immersion and identity over both space (listeners are distant from the stations) and time (the music can be recorded and replayed later). As James emphasises, it is the presence, texture and *vibe* of the music that creates this immersive experience. These dimensions are formative of the self in acoustic contexts, shifting constantly between symbolic and pre-symbolic experience. This takes place through a continuous, repetitive immersion in the music, and the emerging formation of identity oscillating between self and other, in the engagement with genres, musicians, stations and DJs.

Pettman (2017) expands the psychoanalytic implications of sonic experience and intimacy. Arguing that "the prototype of the signifier lies in the aural sphere (Laplanche and Pontalis, 1968, p. 49)", he describes how symbolic and pre-symbolic registers create sonic envelopes of intimacy within earliest experience. Steinmetz (2019), likewise, explores "our first sonic aesthetic" (2019, p. 122), beginning first in the womb, then with "the mother's voice" (p. 122). As she argues, following Bollas (1978), such sonic experience connects directly "to our first transformational object relation" (2019 p. 122).

What are the implications of these investigations of the perceptual and the aural for digital psychoanalysis? Whether dyadic or collective, pre-symbolic or symbolic, self or other, offline or online, each echo Winnicott's emphasis that cultural experience may begin in early interaction but is potential transitional experience at every stage of life. What these accounts add, however, is the importance of the experience as *mediated*. Presence, in the digital domain, is shaped by the medium which, previously, never needed much explicit attention. Now, as Corbella (2020) describes, it has become central. In so doing, it highlights the medium as intrinsic to interaction. Corbella (2020), for example, describes how analysts are, themselves, entirely entangled in social media, potentially revealing aspects of themselves or their lives in ways unimaginable by earlier generations. "What emotional effects does the active participation of their analyst in social media … have on the patient?"

(p. 9). In short, therapeutic boundaries are constantly and unpredictably reconstituted within mobile worlds requiring fresh forms of attention to what we mean by setting and frame, as John Churcher (2015) emphasises.

In this respect, we can usefully extend Corbella's (2020) account of four metaphors of analytic encounter to a fifth. Following Farate (n.d.) and Civitarese and Ferro (2017), she describes the fourth metaphor as the analytic field. Digital experience requires a fifth, the *medium,* which as noted, shapes how the analytic field is both experienced and negotiated. The medium is mobile, transitory, interruptive, immersive and multimodal. As I will return to below, it illustrates the unfolding of Stiegler's concept (1998, 2009, 2018, 2019) of *technis*, of technologies as not merely extensions of human capacities, but as shaping human experience itself. Digital technologies, in the analytic context, simply foreground this in a more urgent way.

One last point. Winnicott notes that there can be "pathological use of transitional phenomena" (1971, p.37).[1] Both MacRury and Yates (2016, p. 54) and André Green (2005, pp. 16 & 30) point to such phenomena as disturbances and distortions in play, but also the impact of rivalry, deception and aggression. In the digital context, mobile devices act as sites for the emergence of transitional objects or object relations of any kind. They also enable constructive and destructive potentials for humans and their technologies. These constitute the dynamic boundaries, the medium, of the digital.

If my focus so far has been mainly on the dyadic, it now needs to turn to the surrounding concerns of cognitive capitalism and its psychopathologies, which I mentioned earlier (Neidich, 2017). First, I describe these huge digital domains. Second, I outline how their pathologies are debated and understood by critical theorists. I specifically draw on the work of Bernard Stiegler, who draws on Winnicott's transitional space and how it illuminates the constitution of toxic and healthy societies through their technological practices.

Cybernetic Worlds and Transitional Spaces

Why should psychotherapists care about the development of emergent digital phenomena such as Non-Fungible Tokens (NFTs), cryptocurrencies or DeFi (decentralised finance), let alone initiatives around carbon coin or reef bonds, the acceleration in the implementation of AI systems, what impact the Internet of Things will have, or the rapid growth in new virtual worlds? Why should we care about virtual worlds at all?

Virtual worlds and digitisation constitute the reality within which we increasingly live and which, consequently, shape the nature and practice of our work. These are sociotechnical issues, in other words, they involve the continuous entanglement of social worlds and technologies — including the social worlds of psychotherapy.

Many commentators, as I describe, demonstrate how work (including therapeutic work) is being reshaped by datafication through digital technologies, let alone related changes in professional practices, or the way our work is regulated and routinised. In short, psychotherapy, as one form of professional work, is already being transformed.

Against this background, it can be comforting for psychotherapists to believe that, as part of a long legacy stretching back to Freud or Jung, their work remains essentially unaffected. Long humane and humanist traditions, grounded in the psychodynamic and

the relational, imply we are inoculated against such changes, yet psychotherapists are just as entangled in what Braidotti (2019) and others describe as the posthuman as anyone. Most of us use Zoom and video conferencing software, texting and mobile devices, social media, online banking, cloud storage, digital files, as well as using the internet for registration, research or professional development reasons, and much else. We are as deeply implicated in these arrangements as any other digital citizen.

To emphasise this point, digital media have already altered the professional interactions with our colleagues and our clients. They reshape the pressure on our routines of work. It includes how we are paid, how we manage "the frame" around appointments or cancellations (text, email), how we advertise, whether we offer online resources to clients, how we communicate with colleagues or engage in distance supervision, and how we protect our sensitive data and ourselves through software updates, secure wi-fi or password managers.

Not only, then, do we have to care about emerging virtual worlds, we cannot avoid them. Psychotherapists, however, possess a limited professional vocabulary and few conceptual frameworks with which to engage with them. Traditionally, psychotherapy has relied on a perspective that focuses primarily on the individual, not the larger collective or nation. Psychoanalysis has certainly investigated these frameworks (Bollas, 1978; Freud, 2015; Sonpar & Kanwar, 2019; Volkan, 2017). Little psychoanalytic work, however, addresses the digital domains I have outlined, let alone the impact of digital capitalism, that confront psychotherapists.

Those disciplines, incidentally, employ a terminology alien and abstract to most psychotherapists. Terms such as "capitalism", let alone "algorithmic capitalism", are rarely part of a therapeutic vocabulary (Tweedy, 2017), yet they are essential to describing the massive, subtle, sometimes dehumanising effects of machine computation. So, using them here is a way to articulate these new experiential worlds. Likewise, critical theory displays little agreement about "best" terms. Why prefer cybernetic over algorithmic capitalism; surveillance capitalism over dataveillance? In part, it simply reflects the sheer speed and magnitude of change. Often, then, the context will indicate why one term is preferable to another.

Why this matters is captured in the thought of the key critical theorist, Bernard Stiegler. Robert Holton (2020) summarises his perspective thus:

> Digital capitalism undermines human desires and projects, simultaneously destroying the legacy of social memory. Transgenerational communication is thereby disrupted, leaving the young increasingly adrift of broader social bonds. The sheer speed of digital algorithmic processes pre-empts reflection and critical debate (p. 200).

Stiegler's perspective foreshadows the acceleration of technocapitalism and its implications and I turn to these before outlining his own analysis.

The Implications of Technocapitalism

Much recent writing captures the immense speed and scale of change in digital commodity capitalism. Despite some of psychoanalysis' foundations in cybernetic and machines (Clough & Johanssen, 2019; Featherstone, 2020), it is still in the process of fully addressing and theorising this (Hallsby 2018, Johnston 2008).

Digital capitalism is variously described as datafication (Erkan, 2019), computational, cognitive or surveillance capitalism (Vercellone, 2007; Zuboff, 2019), semiocapitalism (Berardi, 2009), or algorithmic governmentality (Crogan, 2019). Each term points to our massively interconnected globe where we are ceaselessly tracked and monitored by private and state bodies, whether this is Big Tech (Google, Apple, Facebook, Amazon and Microsoft), or the Five Eyes alliance in the West, China or Russia in the East. As Jagodzinski (2020) notes, "We search Google only to have Google searching us; we naively thought that digital services were free, but it is us who are 'free' to be used by capitalist platforms" (p. 9).

Much of this highly critical commentary responds to Gilles Deleuze's (1992) short, highly influential, analysis of "societies of control"; how our seeming freedom is shaped, monitored and organised in ways that entirely frame how we understand our reality and choices (Brusseau, 2020).

This is critical: the intensive, microscopic interconnectedness of developing technologies at the affective and neural level threatens to embed the societies of control at a subliminal threshold. It is one reason for the new term, "neurocapitalism". As *Vox* magazine headlined it in 2019, "Brain-reading tech is coming. The law is not ready to protect us" (Sigal, 2019). Similarly, Giorgio Griziotti describes how "the body in its entirety connects to networked devices so intimately that they enter into symbiosis and modify each other" (interview with Di Biase, 2016). The simple smartwatch, for instance, not only shapes our behaviour but our expectations of health and fitness, through its numerous sensory measurements and workout modes uploaded to the cloud (Holloway, 2019). Simultaneously, it changes our ideas of fitness and health, just as algorithmic dating sites shift expectations towards a consumer model of intimacy (Longo, 2019) and online porn changes sexual practices (Quadara et al, 2017).

Neurocapitalism extends well beyond this, for example, to emerging brain-computer interfaces. Elon Musk's company "has created flexible 'threads' that can be implanted into a brain and could one day allow you to control your smartphone or computer with just your thoughts" (Samuel, 2019). Neurocapitalism encompasses "the quandary of neural plasticity" (Neidich, 2017) along with neuropharmacology and "Dtx". Dtx is a new field that connects digital therapeutics and clinical pharmacology, blending wearable devices, telehealth and psychological treatments (Chung, 2019). Not surprisingly, the prodigious speed and size of these developments has created widespread concern. Thomas Metzinger commented in 2010:

> The Internet has already become a part of our self-model. We use it for external memory storage, as a cognitive prosthesis, and for emotional autoregulation … Clearly, the integration of hundreds of millions of human brains … into ever new medial environments has already begun to change the structure of conscious experience itself. (p. 234)

Matteo Pasquinelli (2014) and Rosie Braidotti (2019) typify authors who attempt to articulate the tensions implicit in these immense shifts and the interpenetration of existential, neurological and digital commodity worlds. Griziotti (2020) describes them as "biocognitive capitalism" and Benjamin Bratton (2016) as "the design of political geography tuned to this era of planetary-scale computation" (p. 3).

Shoshona Zuboff (2019), in a recent influential book, uses the term "surveillance capitalism". She studies global platforms such as Google, Facebook, Apple, Microsoft and Youtube, and how they organise our collective and largely unconscious activity via algorithms and data mining. She discusses how digital audiences, for example, are presented with material which intensifies their pre-existing choices and behaviours. This is one theme of the Netflix documentary, *The Social Dilemma* (Minow, 2020). Luciana Parisi (2016) describes it as the way algorithmic capitalism attempts to capture every aspect of collective interaction across the planet.

This perspective needs to be placed against its more optimistic alternative. A broad set of schools and approaches study, for example, how algorithms construct "unstable associations of people, things, processes, documents and resources" (Neyland & Möllers, 2017). They do so without the same bleak predictions around control societies, surveillance or the dominance of the hyperreal. Consequently, this work raises questions about how far algorithmic power and neurocapitalism will actually shape or dominate ordinary human activity, even on Facebook (Beer, 2017; Bucher, 2017; Kitchin, 2017). Traditions such as STS (Science and Technology Studies), for example, emphasise human agency and co-engagement with digital processes (Marres & Gerlitz, 2015; Marres & Moats, 2015), rather than its implicit domination.

Likewise, extensive studies in psychiatry offer a more complex assessment of how extensively the internet may be changing or replacing our cognition or memory; or whether individuals are using or being used by dating algorithms (Firth et al, 2019). This, in turn, allows for the possibility for ethical governance with even the most obscure and inaccessible algorithms (Neyland, 2016).

Psychoanalysis/Psychotherapy and the Digital

Psychoanalysis has, itself, extensively investigated social practices in digital worlds (e.g. Krüger & Johanssen, 2016; Emmert-Streib et al, 2019; Bandinelli & Bandinelli, 2021). It includes AI as a form of algorithmic unconscious (Possati, 2020).[2]

Psychology, more broadly, has investigated the development of affective computing, with research over a century about how emotion might be simulated (van den Broek et al, 2011). Online technologies have made this a sprawling field, from asking whether technology is killing human emotion (Eddy, 2019), to exploring how messaging interactions work (Tagg & Lyons, 2021).

Therapies and online technologies have also combined in the development of digital therapies through websites, apps, and social media (Kent, 2019). As Michael Weightman (2020) comments, these are proliferating and appear under a variety of titles: digital or electronic psychotherapy; e-psychotherapy; computer-assisted psychotherapy or internet-based psychotherapy. There are also AI apps, such as counselling or mental health chatbots called Tess or Woebot. Users such as Erin Brodwin (2018) reveal their success ("I spent 2 weeks chatting with a robot about my anxiety—Here's how it went"). In Aotearoa, there are government initiatives which included, in 2020, John Kirwan's Mentemia app, a health journal app called Melon, and the e-therapy programme "Staying on Track" (Clark, 2020).

My focus here, however, is how psychoanalysis and digital worlds influence each other,

how they shape and comprehend each other through the human, the posthuman and various cybernetic agents. These entanglements of consciousness, affect and unconscious processes are intricate and wide-ranging. Patricia Clough (2018) dubs them "the user unconscious", and portrays them as recognising "the other-than-human agencies that are increasingly at work beyond and below the threshold of human consciousness" (Kafer, 2020, p. 1).

Here, she explores how selves are experienced and even formed in online activity as opposed to in person. Online, an individual can also be a user with a "thing-self" (Clough, 2018, p. 78; Chun, 2016). This is the user's separate, somewhat autonomous online identity that assumes a life of its own. The thing-self is what gives shape to what she calls "the user unconscious". A user unconscious is "the unconscious in relation to the collapse into the YOU" (Clough 2018, n.p.), the social identity online. The YOU is one's "cloud of digital traces" (n.p.), as opposed to just an "I". This YOU remains embedded as metadata — images, texts, Facebook interaction, phone activity. It constitutes an individual's identity beyond the in-person self. Fragments of this identity, which Deleuze (1992) calls the "dividual" as opposed to the individual, has a separate existence. It is a thing-self that becomes digitally metabolised. This is one concern voiced in the documentary *The Social Dilemma,* noted earlier.

All this seems a long way from the psychoanalytic understanding of either the "skin ego" (Anzieu, 1989, p. 62) or somatic, polyvagal experience (Slonim, 2014). Yet, as Clough and Jacob Johanssen (2020) discuss, the skin ego and the thing-self also mark some limits of how being is experienced, or known by others, online and offline.[3] Sensate experiences of smell, touch and taste, or even collective heart synchronisation (McCraty, 2017), have limited online equivalence. Each of these somatic communications influences feeling, responsiveness and awareness in ways that audio-visual exchanges do not readily replicate.

The thing-self is where different forms of subjectivity often emerge, whether it is through fan sites, social media activity or online lists. They mark:

> A strong orientation towards self-marketing and self-commodification and can well be seen as the fulfilment of what Adorno, with a view to the cultural industry, termed "psychoanalysis in reverse" (1954, p. 223). (Krüger & Johanssen, 2016, p. 17)

The problem here is that, whether we focus on individual or collective experience within cybernetic worlds, there are ongoing problems for psychotherapists around how to conceptualise the unconscious, the subject, and relational dynamics, in short, how and to what we pay attention to, where digital interaction is concerned.

Critical Theory, Bernard Stiegler, and Transitional Objects

These complex psychodynamics link directly to the larger landscape investigated by critical theory. In this context, it is possible to understand devices not just as boundary objects but, in Bernard Stiegler's writing, as technologies, *pharmakon*. Stiegler's book, *What Makes Life Worth Living* (2013), echoes the same interest as Winnicott in how creative social life is made and sustained. Indeed, he draws directly on Winnicott, beginning his first chapter with the title "The loss of the feeling of existing". As he writes,

> Such was Winnicott's great discovery: the fact that maternal knowledge is knowledge of that which, in the transitional object, consists, though it does not exist, and which gives to the child placed under this protection the feeling that "life is worth living". (p. 2)

He goes on:

> I argue in this work that the transitional object is the first pharmakon … The transitional object is the first pharmakon because it is both an external object on which the mother and child are dependent (losing it is enough to make this clear) … and an object that, not existing but consisting, provides … their serenity, their trust in life, their feeling that life is worth living, their autonomy. (pp. 2-3)

Acknowledging it is essential to the "formation of a healthy psychic apparatus", he follows Winnicott in accepting that "a bad relation to this object" is "destructive of autonomy and trust" (Stiegler, 2013, p. 3). In this context, then, technological devices, technis, represent pharmakon. They possess both toxic and curative potentials.

> Following Plato, we can observe that pharmacology is at once a poison and a cure (Stiegler, 2014). In other words, digital technologies can become toxic or open new vistas and new ways of thinking. (Bradley, 2021, p. 6)

Stiegler's concern, throughout all his work, is the acceleration of hyper-industrialisation that strips out human capacities and memory, embedding them in technical systems throughout the course of human history, first in writing and tools and, latterly via digital systems, AI and computational capitalism. Hyper-industrialisation has created, in Daniel Ross's (2018) summary:

> Numerous deleterious effects that are now being felt at the level of the biosphere itself, including (but not limited to) the crisis of climate change, leading to the proposal that we have entered into a new geological epoch, the Anthropocene. (p. 10)

Michael Melmed (2020) develops a "psychoanalytic container" to make a similar point: that many of our technologies stunt sensuous engagement, "collapse psychic space, diminish our capacity to tolerate frustration, and blind us to our dependence on worlds beyond the human" (p. 1).

In these contexts, boundary objects and mediation are components of the larger sociotechnical systems with which we began.

What are the implications of Stiegler's argument? Like boundary objects, the curative pharmakon ties together self-formation and object formation through accumulated moments of trust and intimacy. It highlights the formation of an integrated, secure self, through human care. Alternatively, the toxic pharmakon threatens fragmentation through datafication and algorithmic capitalism which renders the individual as dividual. Stiegler's writing represents the conscious and unconscious oscillation between curative and toxic,

constantly mediated through mobile devices, singular passage points for a ceaseless semiotic flow (Lembke, 2021).

Conclusion

I asked earlier why psychotherapists should care about NFTs or DeFi. The answer may now look different. We could articulate it in two, related ways. Firstly, through the lens of neural plasticity. As suggested earlier, the human and the cybernetic are increasingly interwoven, so that AI systems, machine learning or the Internet of Things shape how we understand ourselves as human, because we are continuously entangled as data. In this sense, mediation becomes not only increasingly central, but increasingly, and invisibly integrated. As Haraway or Hayles (1999) insist, we are gradually, and constantly, becoming posthuman cyborgs. Neural plasticity is key here. David Eagleman (2020) has recently described the human brain as "a plug'n'play machine" (p.25), where every sensory input can not only be rewired and relearned, but human sensory mechanisms and body shapes can be entirely remodelled. We may extend the human through, for example, neurobiological access to the ultraviolet spectrum or to electromagnetic fields. Donna Haraway (in Haraway and Wolfe 2016) describes this as the coming of the posthuman cyborg. Such neural and somatic plasticity raises profound questions about what it means to be human (Beinsteiner, 2019). Why would that not exercise psychotherapists as much as anyone else?

This view is entwined with the second perspective, which concerns the ceaseless oscillations around cybernetic technologies as pharmakon. Trust, intimacy and security versus alienation, integration or molecular atomisation at the individual or the collective scale. Liberatory potential against addictive, enslaving "proletarianisation" as human data subjects. The perspective is developed here through Stiegler, but Peter Sloterdijk (2014), for example, writes equally forcefully on anthropotechnology and modernity.[4]

When thought of psychoanalytically, these two visions evoke a third: the articulation of the unconscious at both global and personal scales. In object relations terms, they symbolise an endless shuttle between paranoid-schizoid and depressive positions. The paranoid-schizoid is the terrors of predatory data extraction, disintegration of communities to atomised dividuals, and primitive addictions to the machines of digital capital.

The depressive position, anticipated in Winnicott's 'Some Thoughts on the Meaning of the Word Democracy' (1950), suggests more sociable, egalitarian forms of participation. These, he noted, are collaborative achievements, secured only through the effort to maintain "ordinary good homes" (Winnicott, 1950, p. 551). In this context, the digital, as outlined earlier, offers ways to mediate and expand this possibility. Ordinary good homes, Winnicott writes (1950, p. 551), provide "the only setting in which the innate democratic factor can be created" (p. 551).

We can expand this idea much further by drawing on Lambrecht's (2016) work around intergenerational colonial trauma in Aotearoa New Zealand. As he comments, Winnicott's transitional space enables access to 'the space of wairua or spirituality in a safe and discerning manner' (2016, p.155). Here, Winnicott's ordinary good homes translates to whānau and the four pillars of *te whare tapa whā*. Importantly, it encompasses colonial trauma and the spiritual in ways often absent from discussions of the digital. This perspective

offers a way to reconceive the paranoid-schizoid of the dividual and the depressive as a transitional and collective spiritual space (Faimberg 2005, Kirshner 2006).

Where is psychotherapy in these contexts? Like every other institution it, too, must navigate the exploitative or empowering struggles I have outlined. As I noted, it is also a political and institutional practice operating within mental health systems, mixed economies and the welfare state (Kornbluh, 2019; Ngui et al, 2010; Perini, 2016). As Kornbluh (2019) comments, psychoanalysis is a discursive formation; a way of construing other worlds, including the computational. So, psychotherapy is equally entangled in politics, conscious and unconscious, alongside the cybernetic and algorithmic capitalism with which it engages.

How might it respond? One set of possibilities lies in its own technologies. These include the sense-making practices of history-taking, reflection and enquiry central to therapeutic work. Galič et al (2017) echo Winnicott, emphasising how such practices are equally central to larger, democratic projects, regardless of profession or discipline. These practices, together, illuminate mobile activity. In the therapeutic context, how we can constantly examine the ways mobiles silently mediate our work. Such sense-making practices, Galič et al argue, constitute liberatory work. They create possibilities for insight and opportunities for action. Like Stiegler, they point beyond individual to collective engagement; to acting politically against datafication and surveillance capitalism. These are some of the stakes, historical and contemporary, facing psychotherapists in cybernetic times.

Notes

1. See recent commentaries, e.g. Caldwell (2018, 2022) on negative transitional phenomena.
2. The digital unconscious has been interrogated, for example, through concepts of the machinic unconscious, the semiotic and the asemiotic (Deleuze & Guattari, 2009, 2013; Genosko, 1996; Watson, 2009). These terms describe how any particle of communication is transmitted in and between human and machine systems (Jellis et al, 2019; Vachnadze, 2021). In these contexts, the unconscious is understood as a series of emergent intensities and sign systems, well beyond the simply human. It suggests how the human, posthuman and cybernetic might be integrated with unconscious processes in a far more extensive way than Freudian or relational psychoanalysis accommodate (Deleuze & Guattari, 2009, Hayles, 1999).
3. Mellier (2014) discusses different ways in which psychic 'envelopes' are conceived, including economic, topographical, dynamic and genetic.
4. Yuk and Lemmens (2017) provide a useful comparison of Stiegler and Sloterdijk.

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