

Morphing Crypt: Introduction to 'Cryptocurrency and the Intelligence of the Humanities'

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THIS AUSTRALIAN HUMANITIES REVIEW FORUM, 'CRYPTOCURRENCY AND THE Intelligence of the Humanities', brings together a range of core-humanities 'intelligences' and methods in order to think critically about, and better understand, cryptocurrency and its broader effects.¹ Together, the papers in the

¹ Circulated among contributors to this forum were two chapters from Catherine Malabou's *Morphing Intelligence* as well as the following writings on cryptocurrency:

Fiona Allon, 'Money After Blockchain: Gold, Decentralised Politics and the New Libertarianism', *Australian Feminist Studies* 33.96 (2018), 223-43.

Nigel Dodd, 'The Social Life of Bitcoin', *Theory, Culture & Society* 35.3 (2018), 35-56.

Frances Ferguson, 'Bitcoin: A Reader's Guide (The Beauty of the Very Idea)', *Critical Inquiry* 46 (Autumn 2019), 140-66.

Adam Hayes, 'The Socio-Technological Lives of Bitcoin', *Theory, Culture & Society* 36.4 (2019), 49-72.

Nick Land, 'Crypto-Current: An Introduction to Bitcoin and Philosophy.' *Sum* 10.2. 26 November 2018. <<http://sumrevija.si/en/sum10-2-nick-land-crypto-current-an-introduction-to-bitcoin-and-philosophy/>>.

Camilo Mora et al., 'Bitcoin Emissions Alone Could Push Global Warming Above 2°C.' *Nature Climate Change* 8 (2018): 931-3. <<https://doi.org/10.1038/s41558-018-0321-8>>.

Satoshi Nakamoto, 'Bitcoin: A Peer-to-Peer Electronic Cash System.' <<https://bitcoin.org/bitcoin.pdf>>. Originally published in 2008.

Jason Potts, Ellie Rennie and Jake Goldenfein, 'Blockchains and the Crypto City', De Gruyter Olenbourg, 2017. <https://papers.ssrn.com/sol3/papers.cfm?abstract_id=2982885>.

Brett Scott, 'Riches Beyond Belief', <<https://aeon.co/essays/so-you-want-to-invent-your-own-currency>>.

forum broach the speculative gains and losses, profits and costs, risks and opportunities the cryptocurrencies bring. The forum critically pursues the role and significance of cryptocurrency as it is imbricated within a globally-networked infrastructure comprising automated, machine-learned processes that are transforming everyday life, including what it is to *be* in this world.

My idea for the forum was sparked by Catherine Malabou's *Morphing Intelligence: From IQ Measurement to Artificial Brains* (2019), whose title inspires this introduction's title 'Morphing Crypt'. Adding another dimension to her ongoing work on plasticity, *Morphing Intelligence* elucidates three major metamorphoses affecting understandings of intelligence since the concept first emerged along with shifts in scientific, evidence-based measurements of mental life. The first metamorphosis Malabou traces is genetics, with the search for an 'intelligence gene' exemplifying the focus on individuated faculties and heredity. Her second metamorphosis is epigenesis, which represents a shift away from genetic determinism toward recognition of the interaction between environment and phenotype. The third is 'automatic' intelligence. This latest stage in intelligence's metamorphosis occurs alongside the advent of brain-inspired computing, the proliferation of neural networks and the invention of neuromorphic and synaptic machinery (the book discusses IBM's SyNAPSE research program and its neuromorphic circuit, TrueNorth (Malabou 83-5)). This synaptic architecture exemplifies, for Malabou, 'the increasingly refined simulation of "natural" intelligence', which, in turn, has resulted in the breakdown of the previously 'rigid boundaries between nature and artifice' (15).

While Malabou refers this third metamorphosis to the specific example of the invention of a synaptic chip capable of imitating brain processes, a more general condition becomes perceptible in broader entanglements of 'natural' and artificial intelligence. Our quotidian interactions in cyberspace—including our use of e-money—are driving the shift to 'automated' intelligence her book identifies. Importantly, Malabou sees neither automated processes nor interactions in cyberspace as inherently stupefying or instrumentalising. 'Far from being a passive platform', Malabou writes, cyberspace is 'shaped by users' and 'transforms them in return', opening a new educational paradigm with opportunities for an 'autodidactic society', experimental democracy and global self-governance of knowledge (126).

For Malabou, intelligence is both an embodied perspective—a way of being derived from our relation to the world—and a method that aims at equilibrium—a way of negotiating experience aimed at balancing a system and its collective elements. Malabou conceptualises intelligence in the context of present-day advances in cybernetics that contribute to what she considers a seismic shift. Again, this shift concerns an emerging indistinction between 'artificial

intelligence' (AI) and 'natural intelligence'. Malabou writes that this shift has brought:

nothing less than a radical revolution not only in the conditions of thought, knowledge, and expertise—notions commonly associated with intelligence—but in every field of activity, affectivity, and the human psyche. The condition of possibility of this revolution is the systematic use of artificial calculation capacities via algorithms. AI is no neutral technology; it is a transformational technology, challenging the architecture of traditional information systems and thereby bringing about a total upheaval of being-in-the-world. (Malabou 145-6)

Malabou's alertness to the 'total upheaval' affecting our 'being-in-the-world' models an open approach that is nevertheless critical of resurgent hierarchies and social inequalities accompanying technological innovation. *Morphing Intelligence* 'revises' an 'error' foundational to the method of one of Malabou's previous books, *What Should We Do with Our Brain?* (2008).² What's more, the later book discursively *performs* the kinds of enabling malleability and metamorphosis it describes when addressing the previous error. It also addresses widespread anxieties concerning ever-refining developments in computing and AI that, it is feared, may overtake or instrumentalise 'natural' intelligence.

When she turns her attention to the matter of critique in a time of automation, Malabou explicitly considers the situation humanities disciplines face in a time when automated processes and the emergence of new disciplines are affecting knowledge production (128-31). '[T]he negotiation of frontiers', Malabou writes, 'now concerns the relation to the new "outside" of neuroscience and "neuroknowledge" in general' (130). Such disciplines may appear to threaten disciplinary boundaries, such as the role of critique in the humanities. But renewed 'intelligence', Malabou suggests, can surface precisely at such moments of disciplinary alienation.

This renewable intelligence comes out of Malabou's work on plasticity as ongoing metamorphosis. In a 2017 lecture entitled 'The Relation Between Habit and the Fold', Malabou delineates the essential role of habit in the ongoing metamorphosis that is life.³ Habits are here understood in two opposing ways. One the one hand,

² 'I was indeed mistaken', Malabou writes in *Morphing Intelligence*, 'in *What Should We Do with Our Brain?*: plasticity is not, as I argued then, the opposite of the machine, the determining element that stops us from equating the brain with a computer' ... 'Far from leaving me feeling pessimistic, recognizing this error opens up new perspectives (perspectives again!) that formerly eluded me' (113).

³ Catherine Malabou, 'The Relation Between Habit and the Fold', European Graduate School Video Lectures, 12 August 2017, <<https://youtu.be/EglV1eVTrpU>>. As Malabou notes in her

habit is associated with productive accomplishments (such as the daily practice that over time leads one to become a musician). On the other hand, habits tend to harden into compulsive reactions or mechanical (automated) repetitions. Elucidating the relation between habit and the ‘fold’—or the malleable material of living organisms that both stimulates and responds to habit—Malabou explains the double meaning of the French word *plier* (meaning ‘to fold’). *Plier* means both ‘to place one part on another’ (such as a piece of paper folded over itself) and to obey, to yield, to give in under pressure. Remembering the relation between a fold and a habit means remembering that the organic, malleable material of the fold transforms at the very moment when a rupture opens up from within itself, with this opening paving the way for new habits to take the place of old.

What does Malabou’s thought about the ever-malleable ‘folds’ of habit offer us? At a time when the fundamental humanities’ work of analysis and interpretation often seems to recede to the shadow side of newly emergent disciplines and intelligences, how might we reconsider the negative reception of the humanities as a kind of rupture—a breaking open and stopping us in our tracks—that might make us more alert to transformations of intelligence? How might our (often automatic) habit of safeguarding knowledge against the transformation of knowledge from within our institutions regard, rather than be threatened by, those strangers (those institutional ‘outsiders’, 130) that seem to threaten the loss, appropriation or instrumentalisation of our intelligence? It is precisely at such an alienating moment that intelligence might open to a difference, Malabou insists. Such a renewal of intelligence can occur by letting go while igniting new kinds of creative and critical attention. Attending to the habitual reactivity or automaticity of too-entrenched positions, Malabou’s revitalisation of habit occurs at the very point of its rupture. It is at this moment of rupture that recognition of the automatism necessarily accompanying ‘natural’ intelligence can also break through. *Morphing Intelligence* illuminates the often-invisible processes that—hidden in the ‘folds’ (or crypts) of everyday habits—reveal the automated intelligence that has, all along, co-existed with ‘natural’ intelligence.

The *crypto* of the 2008 neologism ‘cryptocurrency’ denotes the encrypted code that high-speed and resource-intensive computers mine. Computer automated proof-of-work encoded in blockchain provides cryptocurrencies, in turn, with their notional value—that is, ‘the amount of time and energy’ used to produce cryptocurrency in a process known as ‘mining’ (Bridle xiii). In more general terms, ‘cryptocurrency’ combines root words *crypto*—from the Greek *κρυπτός*, meaning hidden, concealed, secret—and *currency*—derived from the Latin *currentia* and *currere*, meaning ‘to run’ (OED). The word ‘crypt’ refers alternately to a covered

introduction, the lecture has its basis in a seminar she co-taught with Anne Dufourmantelle on repetition and addiction.

passage, an arcade, an underground room for religious rites, while ‘current’ refers, on one hand, to streaming water or air and, on the other, to the putting of something into circulation and the passing of something (for example, money) from hand-to-hand (*OED*). ‘Cryptocurrency’ effectively places together two opposites—that which is *hidden* alongside that which *circulates*. These streamed secrets hide in the plain sight of our globally-distributed network’s simultaneously transparent and entangled mass of data. If they can be read as digitally-distributed intelligences then cryptocurrencies conceal as much as reveal aspects of what it means to live now, that is with a view to the *current* or present time.

The ‘end of confidence might revivify confidence’, Malabou speculates in her contribution to this *AHR* forum. Addressing major social and political issues resulting from a ‘return of value’ in the form of the reliability and transparency that computer code brings to cryptocurrency, Malabou’s ‘Cryptocurrencies: Anarchist Turn or Strengthening of Surveillance Capitalism? From Bitcoin to Libra’ elucidates an internal conflict that she sees as characterising our contemporary situation, whereby eruptions of libertarian, right-wing anarchist forces contradictorily attend the ultranationalist and authoritarian concentration of power in the upper echelons of governance. This ‘libertarian anarchism’ needs to be distinguished, Malabou argues, from the ‘liberatory anarchism’ that is its counter-model. Absent from this anarchist space, however, is a social bond. But this absence—like the crack in the fold theorised in her habit lecture—‘is being at once exacerbated and repaired by a technological supplement. *Automated confidence is in the process of becoming the substitute for a social bond*’.

‘In the State of Nature Nothing Will Be Lost’, Justin Clemens argues that blockchain is both a political theology and a ‘principal program of power’ that instantiates the supremacy of ‘ordinality’. In contradistinction to cardinal numbering, ordinality describes the time-stamped, sequential chain of data of blockchain whereby each component is dependent on that which came before it. Blockchain, Clemens argues, represents the ‘technical enforcement of ordinality’ that imposes and reinforces ‘technics as a universal state of nature’. Fiona Allon also interrogates the theological basis of cryptocurrency when, in ‘In the Name of the System’, she outlines the implications of trust as it has migrated from centralised authorisations of money to the reputedly failsafe and tamper-proof technology of blockchain. For Allon, faith in machine-learned systems that purport to guarantee security and stability overlooks the way such machines remain subject to (human) turbulence and panic. Likewise, enthusiasm about such ‘smart contracts’ as automated marriage contracts deny the performative promise integral to the sealing of such personal bonds.

In Julian Murphet’s essay ‘block/supply/chain’ distinguishes the in-built transparency and accountability of cryptocurrency from porous, alienable and

expropriable cash. Defining blockchain as ‘impermeable, a perfect, water-tight reification of the event of each exchange’, Murphet explicates the threat it poses to democratisation and redistribution of resources as it enables the sanitation of capital and a potential ‘logistics revolution’. Timothy Erik Ström draws on Georg Simmel’s influential work on money when he writes in his contribution ‘Abstracting Money: Cryptocurrencies, Cybernetics and Contradictions’ of digital-currency’s both ‘calculative’ and ‘practical’ abstractions. Setting out the historical continuities and discontinuities between cashless currency and its counterparts, Strom draws attention to the intensification of social inequalities attending the emergence of cryptocurrency.

David Blaazer’s essay ‘Bitcoin in the Longue Durée: Money, the State and Cryptocurrency’ assesses libertarian and other appraisals of Bitcoin in the context of the long history of money, revealing the continued existence of mythical ideas about barter. In contrast to cryptocurrency whose instability Blaazer links to its lacking money’s role as a ‘unit of account’, the essay draws attention to money’s historical role as both *fiat* (decreed unit of account) and money as exchange value to insist on the need for stability in order that money can function. The role myth plays in how money is misunderstood is also taken up in Mary Mellor’s ‘Bitcoin and the Myths of Neoliberalism’, which explicates enthusiastic take-ups of cryptocurrency in a post-GFC moment during which innovation became a ‘purely technical’ response to crisis. Mellor clarifies the role of barter to money’s formation and explains the historical importance of money as precious metal or other material decreed by either rulers or the state. In ‘Stable Dematerialisations: The Dialectics of Bitcoin’, Ben Noys understands Bitcoin in the context of anti-democratic convergences of dematerialised systems of value with the forms of enforced (authoritarian) security that profit from social and economic dissolution. For Noys, the ‘stable dematerialisations’ that cryptocurrency augment represent a threat both to democracy and the possibility of critique.

Jonathan Beller also addresses the issue of convergence, but in relation to financial, communicative and organisational media when he envisions an awakened ‘economic media’. In ‘Economic Media: Crypto and the Myth of Total Liquidity’, Beller turns André Bazin’s question about cinema toward the question of what crypto manifests, speculating in the process about the democratic remaking of media according to community commons, cooperatives and ‘horizontal’ values. The transforming of a contemporary economic logic of ‘extraction’ to one based on ‘abstraction’ and ‘total liquidity’, Beller writes, may lead to a more just and properly distributive system that benefits, rather than depends on, the poor and precarious. In ‘Cryptocurrency: Kneeling Before Speculation’, Todd Mei considers the role speculation plays in both monetary and cryptocurrency exchanges, drawing attention to the economic imagination structuring trust-based transactional modalities abstracted from labour, social

relations and other material bases of production. Cryptocurrency, he argues, augment the free-floating nature of these forms, indicating that we are still kneeling before the Gods of speculation. Mei's essay ends with an intriguing speculation about whether time-saving operations of digital-era currency (and, by extension, AI and automotive systems) may eventually transform the status-quo.

In 'The Challenges of Distributed Administrative Systems', Ellie Rennie takes the measure of the benefits of blockchain when it comes to fair allocation of payment for artworks. Rennie's essay focuses not on *what* blockchain is so much as *how* it works in the context of statutory agencies and other government-organisational take-ups of the digital technology. In doing so, Rennie draws attention to the 'relational nature of infrastructures' while being rigorously attentive to blockchain's potential reorganising of social structures, where it is capable of necessitating cooperation among participants and flattening hierarchical processes. Finally, Melissa Hardie's 'Epistemology of a Pleat: Blockchain, Feminism, *Charlie's Angels*' draws attention to metaphysical readings of blockchain that pivot on its disintermediating effects. With reference to Sianne Ngai's argument about the centrality of 'the gimmick' to the aesthetics of 'crisis-prone' capitalism, Hardie examines the appearance of cryptocurrency as gimmick in *Charlie's Angels* (2019). Appearing in the film as both a transformational and a flawed medium, cryptocurrency analogises the gimmick insofar as it brings to light an 'historical equivocation'. A 'pleated temporality', the too soon/too late that is folded into cryptocurrency's 'temporal ambiguity' cannot but return cryptocurrency to the logic of mediation it was designed to escape.

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Works Cited

Bridle, James. 'Introduction.' *The White Paper by Satoshi Nakamoto*. Ignota, 2019.
Malabou, Catherine. *Morphing Intelligence: From IQ Measurement to Artificial Brains*. Trans. Carolyn Shread. New York: Columbia UP, 2019.