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Proliferate! A Techno-Social History of the Internet Meme, From Print to Platforms

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Submitted in partial fulfilment of the requirements for the degree of Doctor of Philosophy

Birkbeck, University of London

I declare that this thesis is entirely my own work.

H. Barton. 16/10/2022.

Abstract

Internet memes are often understood as artefacts that have communicative utility within online discourses replete with legible aesthetic and affective attributes. Accordingly, valuable scholarly work has been done to understand how internet memes function as and within online social interactions. However, less attention has been paid to the ways in which the assemblage of technologies that comprise the internet mediate the social practices that produce internet memes.

This thesis attends to this lesser-studied area by acknowledging that it is from the *internet*, as a particular but evolving assemblage of technologies, that the *internet meme* emerges. In so doing, I develop an analytic framework which recovers technics as co-constitutive of the social practices that bring forth internet memes. Thus, the *techno-social* of this thesis' title references the supposition that internet memes are contingent on the irreducible relationship between the technics of the internet and the associated social practices they mediate.

This claim is advanced by *historicising* the internet meme. In the first half of this thesis, I identify a selection of precursor "memes" that emerged from antecedent techno-social arrangements present in mid-to-late 20^{th} century Anglo / U.S.-centric discourses. These accounts are mobilised to better clarify the specificity of the internet in mediating the techno-social practices that produce internet memes – a dynamic explored in the latter chapters of the thesis. A *techno-social history* of the meme therefore asserts that memes – internet or otherwise – have historically emerged and will continue to emerge across myriad techno-social milieu; with the historical framing functioning as an analytic device that draws into relief the ways in which the *internet* makes the *internet meme* distinct.

Such an approach relies on a working definition of the meme, internet or otherwise. This is no simple task. As is recounted in this thesis' introduction, the concept of "the meme" has been a contested one since the term's emergence. Drawing on the work of Limor Shifman in particular, I assert that memes can only be differentiated from other forms of cultural production in the specific ways they proliferate – via

social practices of reproduction and remix animated by the use of technical media. Notably, the recognition of proliferation as the meme's defining feature undergirds this thesis' analytical framing, since proliferation as a social practice, and the aesthetic and affective attributes of the memes that emerge, must be realised in ways contingent on technical affordances. The *internet meme* then, is recognisable as such since it proliferates, and is rendered distinct through being proliferated on the internet.

Having provided terms of definition, Chapter One moves to historicise the proliferating meme. In this section, the manipulation of photographic imagery relating to the Kennedy Assassination – by professional media, governmental bodies, and private citizen researchers – is reconsidered as a form of meme. Articulated as such, this chapter goes on to detail the ways in which the aesthetics and utilities of the Kennedy Assassination "meme" were realised in ways contingent on the techno-social conditions from which it emerged. Chapter Two develops this perspective further in assessing the production of mid-to-late 20th century alt-media as a form of memetic social practice; afforded by the appropriation of reprographic technologies, which in turn supplied the artefactual output with distinct forms and functions, and cultural significances.

Having made the case for mobilising a techno-social history of the meme in the preceding sections, Chapter Three moves this work "online", and offers an account of how the early web of the '90's and '00's brought forth its own meme forms, notably the spread of web-based urban legends. Chapter Four then turns to address examples of what might be widely understood as internet memes *proper* - the Image Macro and GIF formats – and accounts for the ways in which the social usage of the assemblage of digital media technologies that comprise the internet gave rise to and proliferated these meme forms. Finally, Chapter Five will reflexively consider what the framework established in the prior chapters reveals about the contemporaneous internet meme – a meme form that emerges from a platformised technosocial milieu – a milieu I'll argue is characterised by financialised media ubiquity.

The framework developed in this thesis provides a lens not only for studying the distinct forms and functions of meme forms, with particular attention paid to the internet meme, but also accounts for the inevitable future evolution of memes as techno-social arrays continue to reconfigure.

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Dedicated to my father, and my niece

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Preface

Faxlore: Memes Down the Line

When working as a general assistant at a small London art gallery in the early 2010s, I helped the curator prepare for an exhibition about Faxlore – also known as Xeroxlore or Photocopylore. As the name infers, Faxlore is a form of folklore shared by fax. Comprising humorous missives, rumours and gossip, poems, drawings, and collaged illustrations – created for reasons that ranged from amusement to catharsis – Faxlore proliferated through (typically U.S. based) offices during the 1970s and '80s as an emergent form of participatory practice.

Despite its cultivation within office-based milieus, Faxlore was far from *strictly business*. Crafted through the canny (mis)use of workplace equipment, Faxlore would frequently reference annoying bosses, poor pay, and the sort of boredom cultivated through spending 7.5 hours in a cramped beige cubicle. Faxlore gave voice to archetypical white-collar worker gripes, in other words. Indeed, Faxlore was so thick with office-inspired ennui that treatments of existential tedium became a recurring theme. Take the "*screwed at work*" series (Figures 1, 2, 3) – a set of images that channelled the angst endured when whiling away of one's life as an underappreciated paper-pusher (see also "*this job is a test*" (Figure 4)). Asynchronously sent from one disaffected worker to another, "*screwed at work*" and *this job is a test*", among many other refrains, would propagate across networks of office employees, being re-shared and riffed on over time.

Fax to fax, office to office, office worker to office worker, pieces of Faxlore may have ended up pinned to a noticeboard, taped up inside a worker's booth – or else they may have lived on, reproduced, remixed, and thereafter encountered by a fellow colleague equally dissatisfied by the daily grind. It was perhaps appropriate then, that in preparation for the gallery exhibition, I had been tasked with running off more copies of these once vital materials. In echoes of countless gestures enacted before, I found myself reviving, as it were, a selection of these long-dormant artefacts: I reproduced them, one by one, in order for them to be encountered anew.



Figure 1. An example the "screwed at work trope" in Faxlore, scanned from Alan Dundes and Carl R. Pagter's Work hard and you shall be rewarded: Urban folklore from the paperwork empire (1992)

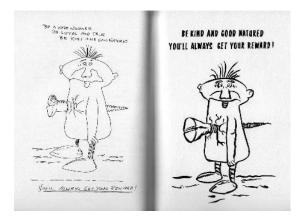


Figure 2. An example the "screwed at work trope" in Faxlore, scanned from Alan Dundes and Carl R. Pagter's Work hard and you shall be rewarded: Urban folklore from the paperwork empire (1992)

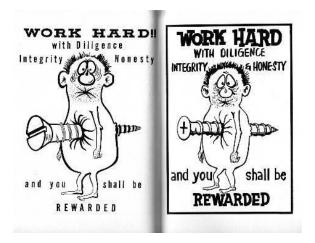


Figure 3. An example the "screwed at work trope" in Faxlore, scanned from Alan Dundes and Carl R. Pagter's Work hard and you shall be rewarded: Urban folklore from the paperwork empire (1992)



Figure 4. An example of Faxlore that expresses worker dissatisfaction, scanned from Alan Dundes and Carl R. Pagter's Work hard and you shall be rewarded: Urban folklore from the paperwork empire (1992)

In truth, my engagement with these artefacts was not so self-reflexive at the time, with much of my attention focused on making sure the copies printed off were suitable for display. However, I was piqued by how obliquely familiar this hitherto unknown family of folklore seemed. It did not take too long before I realised why: the piles of Faxlore being run through the photocopier were a little bit like internet memes. Specifically – and bearing in mind this was 2012 or thereabouts – Faxlore seemed resonant of

Image Macro memes (see Figure 5 for an example). All the component parts were there – a recurrent or remixed image, a humorous strapline, which combined to tell a joke, or to riff on a theme. *Memes by fax*, I thought – how curious.

And then I carried on with my job.



Figure 5. A typical Image Macro meme in circulation c.2012 (specifically a LOLcat meme, complete with idiosyncratic grammatical constructions known as LOLspeak) aggregated by cheezburger.com

But the encounter with Faxlore never quite left me, and instead became something of a growing obsession. Could – or should – these phenomena be considered memes? What conceptualisation of the meme accounts for both Faxlore and the internet meme? What differentiates Faxlore from internet memes, and why is understanding the similarities and differences important?

Sure enough, it seemed too reductive by far to merely consider examples of Faxlore to be internet memes *sent by fax*. In handling the materials directly, it became apparent to me that the paper-based compositions I had been tasked with reproducing – the pieces of Faxlore themselves – had materialised in ways not incidental to, but instead constituted by, the fax machine and the social contexts in which it has been operationalised. That is, it was *specifically* the fax machine, as it existed and was put to (mis)use in the office

environment that resulted in Faxlore being produced. It was the fax (and supplies of printer paper) as office equipment, subverted and reappropriated by rebellious staff, that were constitutive to both the form and function of the material artefacts apprehended as Faxlore. It was specifically the fax machine as a reprographic technology that imparted a set of aesthetic sensibilities onto Faxlore artefacts – their graphical monochrome, the bold outlines, and high contrast designs adopted to aid legibility. It was specifically the fax machine as telecommunications device utilised within offices that channelled the spikey refrains of office workers and enabled them to form a participatory practice with their colleagues a state or two over. Which is to say, that Faxlore could not have emerged in the way that it did outwith the specific the technical and social preconditions that conspired to materialise it.

Yet, while Faxlore emerged within a particular technical and social context, it remains very internet meme-like; and does so in ways that exceed the formal resonances it shares with the image and text compositions characteristic of the Image Macro. Notably, Faxlore and internet memes are both similarly central to specific forms of communicative cultural practices, in which tropes, ideas, running jokes, cultural concerns are shared through the production of artefacts. Moreover, and pertinent to the realisation of these practices, both Faxlore and internet memes spread in a comparable manner; with new artefacts being produced through the reproduction, riff, and remix of extant materials, which thereafter agglomerate into corpuses that continue to transform as they proliferate. Further, the manner by which both Faxlore and internet memes spread has a bearing on how meaning is conveyed to the communities of practice engaging in the production and encounter of these materials. Specifically, Faxlore and internet memes both impart meanings through the creation and sharing of individual artefacts *and also* through the consolidation of myriad individual artefacts created in awareness of each other into apprehensible corpuses.

This process, of individual "meme" artefacts being created in awareness of each other, is for both Faxlore and internet memes alike, realised through mediation – the use of technical media; namely the fax machine and internet technics respectively. Noting this is to acknowledge that the emergence of both Faxlore and internet memes must be understood as being contingent on the social use of technics. Moreover, observing that Faxlore and internet memes spread in a similar fashion is also to recognise that these phenomena possess similar ontological configurations – as individual artefacts that aggregate into legible and extensible corpuses. From there then, we might deduce that though the technical and social contexts from which Faxlore and internet memes emerge are different in constitutive ways, both these phenomena spread in an equivalent manner, and furthermore unfold into analogous ontological configurations. Put otherwise, the way these phenomena spread through contextual, social uses of technics, and the equivalent ontological configurations they assume in doing so – as individual "meme" instances consolidated into corpuses – is the common thread, the line, that runs between Faxlore and the internet meme.

Safe to say, I found apprehending both Faxlore and the internet meme as ontologically *of a kind* to be a productive exercise. Indeed, the argument I develop in the thesis that follows has in large part been wrought as a consequence of my brief, workplace dealings with Faxlore – an encounter which, for three main reasons, has undergirded my contention that considerations of technical mediation and ontology opens up opportunities to clarify how memes, internet or otherwise, may be conceptualised, analysed, and thereafter reflexively put into service as analytic devices in their own right.

Firstly, the move to conceptualise Faxlore as a meme invites consideration of how this meme-form was co-constituted by technical arrangements in distinct ways – given that the materialisation of the Faxlore "meme" was contingent on the use of reprographic, telecommunication technologies. Moreover, it follows that the aesthetic and affective attributes of Faxlore – that is, the material quality of the artefacts produced and their communicative utility as a corpus – were contingently imparted by both mediating technologies and social contexts in which they emerged. And if Faxlore are "memes" which are imbued with specific aesthetic and affective attributes in ways predicated by the social use technics, then the same will hold for internet memes. From there, the question becomes; how might internet memes be better

understood through mobilising this perspective and more fully accounting for their socially operationalised technicity?

Secondly, theorising Faxlore to be a meme infers that as-yet unstipulated meme forms – brought forth through the use of other technological arrays put to use within social practices – might be said to exist, awaiting recovery. From there, we may ask if other "pre-cursor" meme forms could be argued to exist – and if so, what differentiates them from the internet meme. And reflexively, how can an assessment of what makes an internet meme form distinct constructively support analyses of these capricious elements of culture?

The third area for consideration opened up by this theoretical move is to suggest that the "meme" itself may be mobilised as a productive analytic tool. If memes are to be accepted as phenomena with a particular ontological configuration that unfolds through social practice, memes – on the internet, *by fax,* or otherwise – must be understood as co-constituted by, and entirely contingent upon, interplays between the technical and the social. Such a view then also suggests that specific "memes", as either instances or corpuses, may serve as apertures, or analytic devices, through which the specific and contingent technosocial conditions of their emergences can be apprehended. And if memes can be instrumentalised as tools for analysis, what insights might their deployment reveal?

The thesis that follows, completed some years down the line, has developed in ways inspired by my encounter with Faxlore – with its lines of enquiry produced as a consequence of working with and through the questions provoked by those *memes sent by fax*. Indeed, it is in response to these prompts that the theoretical perspective delivered in this work hopes to, in turn, inspire new thinking about memes, internet or otherwise.

Introduction

Social milieux of the 21st century, subject to the constituting presence of the internet, appear awash with memes. As Limor Shifman put it, the contemporary era is one "driven by a hyper-memetic logic" (2013a, p. 365); calibrated to resolve myriad cultural phenomena as *memes* that propagate across and between devices, online social fora, verticals, and consciousnesses. An era of *hyper-memetic logic* produces life-worlds in which encounters with digital artefacts – images, GIFs, snippets of text, sounds clips, mediated gestures – are habituated as part of the everyday. These logics then, also produce reconfigured epistemic regimes and social contexts in which meaning, affect, and aesthetics are in part brokered by the creation, encounter, and interpretation of a dizzying abundance of memes.

Consequently, internet memes have stoked much debate and inspired increasing quantities of analysis in recent years. Academic forays into internet memes tentatively began in the 1990s and 2000s, before becoming a thriving field of research from the 2010s onwards as their significances to contemporary cultural, political, and aesthetic practices were assessed with increasing urgency. Broader media discourses concerning internet memes also underwent an uptick in the 2010s. Notably, this period of time saw internet memes ever more debated in respect to their pertinence to political manoeuvrings – from internet meme usage within progressivist social movements to their utilisation by populist, "alt-right", and neo-fascist nexuses – along with ongoing considerations of their significance within popular culture, and their longstanding associations with humour and play. This was a *hyper-memetic era* that produced JPEGs of cute cats, hashtags that championed activist causes, and endless looping GIFs of goofy pop stars, just as readily as it brough forth digital artefacts that functioned as vehicles for the sharing of so-called "fake news", cartoon frogs that celebrated hate crimes, and myriad digital miscellanea "weaponised" within the so-called culture wars, in which consensus reality was expended as collateral damage.

It is understandable then, that by the late 2010s, analyses of internet memes – academic or otherwise – were issued with a frequency indicative of the meme's significances to communicative practices, and indeed, experiences of everyday life. Oftentimes, such analyses paid attention to *what* communicative utilities an internet meme might possess, *how* this came to be, and *who* was impacted by the effects of said memes' emergence, propagation, and operationalisation. As I will make clear in more detail later in this introduction, these forays were and remain entirely necessary. Internet memes' communicative qualities have repeatedly been demonstrated in recent years, with their cultural import to groups marginalised and dominant evinced in myriad and complex ways – all of which entirely merits diligent and ongoing study. Moreover, as signifiers and arbiters of meanings and cultural knowledge, the 2010s made clear that the form and utility of these proliferate phenomena are salient to the making and breaking of dynamics within social realms – a circumstance reflective of the legitimate interests internet memes were subject to in academic and media discourses. Which is to say that the 2010s saw internet memes correctly become recognised as consequential to the unfolding of life experiences: as existential.



Figure 6. An example of the Is This a Pigeon meme, created by the author

Indeed, it is in acknowledgment of the internet memes' existential cultural imports, manifesting in exponential variations of format, arrays of content, and replete with multifarious possibilities for

utilisation, that this thesis begins with a question that might seem to efface the manifestly apparent: exactly *what is an internet meme*? If the 21st century is an *era of hyper-memetic logic* – that is, a set of conditions in which any cultural phenomenon could conceivably be rendered as an (existentially significant) internet meme, while conversely habituating the internet meme as a vehicle through which any cultural phenomenon could find expression (a dynamic I have perhaps inevitably encapsulated as a meme in Figure 6, above), then questions are agitated around how an internet meme might be adequately defined. The proposition that one could anticipate just about any type of cultural occurrence to resolve as a meme, which would take any of the aesthetic forms made available by the internet, suggests that defining a meme in terms of its artefactual properties alone is too narrow a scope, while apprehending the meme in respect to the breadth of cultural activity it can become imbricated in is too-broad a heuristic. Once again then: what is an internet meme?

The Clue is in the Title

The ratification of the internet meme as a cultural phenomenon has been predicated on memes becoming consolidated as a nameable, legible, and thereafter analysable subject. Yet the term *internet meme* itself holds within it some conceptual complexity, which begins to unfurl when attention is paid to grammar. It is useful to note that *internet meme* is both a collective singular noun and a singular noun depending on use. Someone might say "I love the Is This a Pigeon meme" when talking about that particular meme series, and "I love that Is This a Pigeon meme" when talking about one specific meme instance. This grammatical differentiation indicates that internet memes (in the collective singular) become recognised as *internet memes* when multiple individual internet memes (singular) accrete into corpuses. That is, internet memes become apprehensible, utilisable, and consequential *as* internet memes (collective singular) when numerous partially differentiated, partially assimilated, asynchronously produced, *singular* meme instances – individual meme artefacts – proliferate and become legible as, and as part of, a corpus. Noting this dynamic has salience beyond adding useful definition to terminology. For, to say that internet memes only become apprehensible as *internet memes* when myriad individual meme instances, bearing signs of

reproduction along with remix, proliferate and agglomerate infers that it is an *ontological* configuration that distinguishes them as a specific type of phenomenon. This suggests that internet memes possess an ontology that is constitutive to their phenomenology.

Since an ontological reading of internet memes posits that numerous singular meme instances become legible when aggregating into corpuses, it follows that both the production of meme artefacts and their subsequent accretion into tranches, and the conveyances of meaning realised within social milieux throughout, are predicated by and contingent on the use of technical media. Which is to say, that internet memes must be apprehended as emergences that materialise in ways constituted by (internet) technics.

It might be said that recognising (in the case of the internet, complex) technical assemblages as coconstitutive to the emergence of internet memes within social practices is a somewhat prosaic, materialist observation. Internet memes emerge on the internet – and so what?

Well, it is precisely the "so what" that this thesis will lean into. In the treatise that follows, I will argue that that attending to the particular ontological configuration of internet memes clarifies the (perhaps overlooked) importance of the technical assemblages used in their materialisation. Moreover, I will assert that recognising the technically afforded, ontological configuration that internet memes unfold into – as multiple instances that aggregate into corpuses – opens up a framework for assessing the meme with a renewed focus.

Within an ontological interpretation, individual internet meme instances are inferred as being imbued with aesthetic and affective attributes in ways that are irreducible from the use of technics – since the artefactual properties a meme might possess falls within the parameters of what technical mediation can produce. At the same time, the agglomeration of meme instances into corpuses – inclusive of the ways by which technics afford the consolidation of singular memes into corpuses, a process which itself confers

and conveys meanings – doubly implicates technics in the constitution of internet memes. Which is to say that within an ontological reading of internet memes, internet technics must be understood as determinate to the dynamic ontological configuration – of individual artefacts and corpuses – that internet memes unfold into.

Noting the constituting role of technics in the bringing forth of internet memes has significant implications. For, stipulating technics and their affordances as preconditions to both the aesthetic and affective properties internet meme instances, and the distinct ways in which internet memes are materialised and thereafter recognised as "memes" at all – that is, how memes have social utility as meaning-making – suggests that the co-constitutive role of internet technics must be accounted for if the internet meme is to be wholistically conceptualised.

Such a perspective therefore suggests that internet memes are technical not only because they are digital artefacts – but also because their technicity in entirely inherent to their ontology, and therefore their phenomenology. And it is in recognition of this dynamic that I suggest that – per the title of this work – memes are *techno-social* phenomena; phenomena that emerge in ways that are co-constituted by social and technical arrangements, which in turn see their specific ontological configuration expressed in contingent and dynamic ways.

As such, there is an emphasis on attending to technics in what follows. To some extent, this is a purposeful recalibration; a sort of corrective. For while the social cannot be said to exist *a priori* of the technical, with both are realised in relational ways – internet meme scholarship to date has focussed less the importance of technics in the emergence of internet memes than might be expected, given their inherent technicity. And it is in response to the importance of technics, identified through paying attention to the ontology of internet memes, that this work pays particular attention. Therefore, my assessment of internet memes as being inherently technical is not an attempt to further a determinist

perspective. Rather, by pointedly accounting for the role technics play in the materialisation and cultural significances of internet memes, this thesis seeks to constructively trouble, and thereafter add further definition to how internet memes are conceptualised.

And it is also in regard to technics that the methodological positioning of this work as a *history* becomes pertinent. The conjecture of this thesis infers that while the ontology of internet memes remains consistently recognisable, the specific and contingent ways in which specific meme instances and corpuses materialise will be dynamically realised by – and change in step with – the evolution of the techno-social contexts from which they emerge. The internet memes of the early 2010s – such as the earnest Image Macros discussed in Chapter Four – differ from those that proliferated at the end of the decade – such as the ironised "meme economy" discourses referenced in Chapter Five – since their forms, functions, and significances were subject to ongoing recalibration as the technical arrays and social contexts they emerged from iterated. This suggests that recognising internet memes first and foremost as ontologically distinct phenomena is constructive because they are inherently in a state of continual emergence and iteration. In this context, the history – or rather, histories – of the internet meme need not account for one definite account of what they look like or what they do. Instead, it can take into account the trajectories and contingent moments that brought any given meme forth and lie encoded within in, and moreover, engage with their ongoing aesthetic and affective evolution as part of their phenomenological essence.

A *techno-social history of internet memes* also acknowledges that attempting to define the internet meme in respect to its ontology raises some points of discomfort. For one, it rather complicates internet meme scholarship by implying that the "internet meme" is a specific meme type, and a child to the broader phenomenological parent category of "meme"; which in turn insinuates that the latter must be reconciled with before the former can be fully theorised. If one is to accept that the "internet meme" is a subvariant of the "meme", then the implication is that that memes are always-already historical; the existence of a category of phenomena called the "meme" is a precondition for the emergence of the "internet meme".

This angle of attack therefore suggests that there is another question that requires attention: what is *a meme*? Could it be that memes are a category of phenomena distinguished by some other essential characteristic – a *haecceity*, to borrow a term from Giles Deleuze (1988), or *thisness* – which makes them apprehensible as such? The conjecture this thesis furthers is that the distinct ontology of memes, which is predicated on the process of meme instances aggregating into corpuses in ways materialised through the social use of technics, is the *thisness* of the meme – and that the techno-social contexts in which a meme proliferates are the factors which become constitutive to a memes' forms, functions, aesthetics, affects, and cultural significances.

Such a proposition raises further discomfiture still, for a reading of the "internet meme" as a meme subvariant suggests the existence then *other* meme subvariants – ones that predate the internet, or perhaps emerge across differently-realised milieux. In short, such a conceptualisation would suggest there is a project to be had in retroactively identifying "memes" before the fact. It may seem like such a conceptualisation could suggest something of a return to the evolutionary biologically-inflected field of "memetics" that emerged in the 1970s, which – for reasons detailed subsequently in this introduction – would imply that this thesis is encouraging a return to the unsatisfying and analytically stymying positions memetics developed in the 20th century. As this introductory chapter will go on to argue, a return to "classic" memetics is not being suggested in this work – though elements of the memeticists' abandoned theoretical positions have been recovered for purposes of conceptual clarification.

A final uneasy implication is also brought in through inferring that such a meme type is qualified in some way by its affix "internet": Does an ontological, media materialist reading of internet memes imply that they are simply *memes that emerge on the internet?* And if so, what is the significance of that? In regard to this proposition, this thesis suggests that, as a method, the recovery of an internet meme's *techno-social history* has further salience still, given that assessing the similarities and differences between meme types, internet or otherwise, should further clarify what remains a constant, and what characteristics are subject to change. The example of Faxlore, discussed briefly in the preface speaks to this, possessing as it did,

ontological similarities to internet memes, while realising its instances via different technical media arrays as used within different social contexts. Which is to say that Faxlore unfolded into the same ontological configuration as the internet meme, while emerging from different constituting techno-social conditions of emergence. So, while Faxlore corpuses bear many similarities to internet memes, they cannot be convincingly labelled as merely "internet memes sent by fax". They may, however, be considered as memes that emerged through the use of fax machines in situated social practices. What can be gleaned then, by attending to internet memes as memes that emerge on the internet – in what ways does the constituting presence of the internet make the memes forms that materialise through its operationalisation distinct?

Historicisation then, is deployed in this thesis to both further the assertion that memes become apprehensible as particular phenomenon in respect to their ontology by accounting for, and thereby as a pointed methodology by which the distinct characteristics possessed by any particular meme type can be surfaced, and thereafter productively analysed. Historicisation is also therefore revealed a method through which the claim that memes are ontological can be asserted and simultaneously an approach which allows the distinct formal and functional characteristics (and thereafter cultural effects) of specific memes varieties, such as the internet meme can be drawn into relief.

Inspired by these concerns, the thesis that follows seeks to draw the internet meme into relief by first reconsidering quite what a "meme" might be considered to be – and from there proposing terms by which "internet memes" might be constructively apprehended. It may seem counterintuitive, but my supposition here is that broadening the scope through which "memes" might be construed is a method by which "internet memes" can be addressed with renewed focus. Indeed, this thesis takes this approach with the specific aim of furthering understandings of the forms and functions yoked and yielded by internet memes in all their existential capacity.

Furthermore, in proposing that historicisation reveals memes, internet or otherwise - defined in respect of their ontological configuration - as contingent on and co-constituted by their materialisation within techno-social contexts - I am suggesting they must be reflective of the techno-social conditions from which they emerged. It follows then, that the method of historicising the internet meme and recognising its ontological consistency (as one and many) also positions the meme as a phenomenon that can be instrumentalised for analytical purposes; as a diagnostic tool, or aperture, via which the conditions from which they were brought forth can be assessed. This technique is resonant of Sarah Kember and Joanna Zylinksa's notion of "cutting" (2012), in which the materialisation of an artefact is considered as a cut - amoment of exposure of a medial flow, revealing of the techno-social context from which the meme emerged. Because a meme, internet or otherwise, is inherently techno-social, and historicisation shows that the techno-social contingency of the internet meme ensures that memes emerge in contextual ways, then close reading of any one meme instance, or series, must disclose insights about and into its conditions of emergence. In this sense, the case studies developed in each chapter of this thesis - which consider a range of 20th and 21st century phenomena as memes, internet or otherwise - are mobilised both to advance and undergird the claims I make in respect to the ontology of the meme and to demonstrate how memes can be positioned as analytic devices through which their techno-social conditions of emergence can be recovered.

As such, the methodology advanced in this thesis, which uses historicisation to recalibrate and refine how memes might be conceptualised, and thereafter draw internet memes out into relief, *also* mobilises memes themselves as analytic devices. Such a reading posits memes both as analysable in respect to their ontological configuration – and thereafter the forms and functions they demonstrate in ways afforded by technics – while serving as a means through which contingent and constitutive techno-social conditions from which they emerged can be recovered and analysed when a meme itself is put into service as an analytic device.

The Evolution of Meme Theory

This is a timely juncture to clarify a caveat briefly stated in the preceding section: that the theoretical perspectives furthered in this thesis are by no means tantamount to a retrograde fallback to memetics – the infamous discipline what emerged in the 1970s (and became largely defunct around the turn of the Millennium). Yet given the internet meme was named as such in direct response to the once burgeoning field of memetics, a necessary first step in this endeavour is to situate this thesis' perspectives on internet memes, and thereby the wider concept of the meme which I suggest it would be beneficial to rethink and recover, against the background noise of – and any salient remnants salvageable from – a theoretical forebear; a step that aptly, requires brief historicisation.

The word "meme" was, perhaps infamously, coined by evolutionary biologist Richard Dawkins in his 1976 popular science bestseller *The Selfish Gene.* In this book, Dawkins posited a theory of evolutionary biology in which natural selection – the transmission of biotic information – was characterised as a competitive, "selfish" process. Within his treatise, Dawkins also briefly ruminated on how *cultural,* rather than *biological,* evolution may occur in a similarly "selfish" way, dedicating one chapter to this specific concern. In this section, Dawkins theorised that culture is transmitted in a dynamic akin to natural selection, propagated by what he called *memes*; non-genetic bits of "stuff", traversing from person to person, characterised as *units of culture*.¹ In Dawkins' formulation, memes would "[leap] from brain to brain via a process which, in the broad sense, can be called imitation...When you plant a fertile meme in my mind you literally parasitize [sic] my brain, turning it into a vehicle for the meme's propagation in just the way that a virus may parasitize [sic] the genetic mechanism of a host cell." (1976, p. 192). These then, were memes that desired survival, defined by their spread through populations by *variation, selection, and retention, competing for the attention of basts:* "If a meme is to dominate the attention of a human brain, it must do so at the expense of `rival' memes." (Dawkins, 1982, p.197)

¹ Interestingly, and a noted by Limor Shifman, a term similar to "meme" and applied in respect to theories of cultural evolution appeared a century earlier in 1870: "Die Mneme" (from the Greek *mneme*, or memory). Die Mneme was used by sociologist Ewald Hering, before later being adopted by German biologist Richard Semon who included it in the title of his book *Die Mnemischen Empfindungen in ihren Beziehungen zu den Originalempfindungen*, published in 1904. (Shifman, 2013a, p. 363)

Given the conceptual framing being advanced by Dawkins, the choice to coin the term "meme" was neat – speaking to his inference that memes are to cultural development as genes are to biological evolution, while invoking as it did the literary notion of *mimesis*, or replication. Not that these memes were postulated as replicating with consistent fidelity. Rather, they were couched, analogous to genes, as undergoing degrees of modification while spreading through populaces. The material result of these chains of reproduction and variation were such things as "tunes, ideas, catch-phrases, clothes fashions, ways of making pots or of building arches" (Dawkins, 1976, p. 192) – and other artefacts and cultural phenomena that remained useful and pertinent to human experience, that were subject to evolution and iteration over time and across contexts. That is, for Dawkins, the gamut of cultural output could be explicated by the evolution of memes, are moreover, the memes which perpetrate human culture may actually evolve in ways that are to their self-advantage; that is, ensure their ongoing "survival" by exploiting the human the capability for cultural reproduction "to the full." (p. 200) Concluding his chapter, Dawkins suggested that by recognising ourselves as "meme machines", humans will become equipped to "rebel against the tyranny of the selfish replicators." (p, 201)

Despite this weighty claim, by his own admission, Dawkins' original definition of the meme was more speculative suggestion than a fully fleshed-out argument – with the chapter dedicated to memes in the first edition of *The Selfish Gene* comprising a total of 13 pages.² Nonetheless, this catchily-named, proto-concept would – appropriately enough – take hold in a number of academic discourses, before spreading and undergoing modification in popular imaginaries in the decades subsequent to its inauguration. Gaining popularity under the banner of *memetics*, the notional meme became the central concern of an incipient field of study that gained traction during the 1980s up until the early 2000s, with the online *Journal of Memetics – Evolutionary Models of Information Transmission* launched in 1997. During this period, a

² Dawkins has revisited *the meme* throughout his career. The final chapter of the 1976 edition of *The Selfish Gene*, in which his concept first appeared, was expanded to three chapters in the second edition, published 1989. Among other papers, articles, and lectures, Dawkins also engaged with the meme in his 1982 book *The Extended Phenotype*.

cohort of scholars attempted to establish memetics as a scientific research discipline in which the meme – conceptualised as a *unit of culture* – was touted as measurable; the "unit" by which models of cultural evolution could be saliently tested.

As memetics gained traction, a number of its key proponents gained renown – and in some quarters, infamy. Philosopher and cognitive scientist Daniel Dennett for instance, furthered Dawkins' putative "memes-as-genes" proposition in his influential book Consciousness Explained (1993). In this work, Dennett drew up the model of "mental contagion", which advanced the theory that memes - however defined are furthered by natural selection. Moreover, Dennett controversially championed the meme as "an information-packet with attitude" (Dennett, 1999, p.125); bundles of cultural code that wished to propagate themselves. This was a stronger stance than Dawkins' more speculative rumination, proposing as it did that meme "units" could be properly considered entities replete with agency – a will to spread, the desire to replicate, and a want to "survive". From there, Dennett applied his conceptualisation of memetics to theories of consciousness where "survival of the fittest" scenarios explicated the nonteleological emergence and evolution of language, creative expression, and social behaviours. Put otherwise, Dennett was suggesting that certain memes possess more efficacy, utility, and adaptability than others, and that human life-worlds become shaped by the success of some memes over others. A meme therefore adapts in order to be selected by its human host, by being useful to the project of human survival: "information is design worth getting" (1993, p. 115). Dennett's argument was hailed as paradigmatic by some, and significantly, amplified and entrenched the epidemiological metaphor still present is discourses today. Yet, as critics pointed out, the Dennett-mandated "memes-as-contagion" purview was rather seriously compromised by a conceptual gap that lay at its heart: the failure to define what, in ontological, measurable terms, these agentic meme units were.

Regardless, Dennett's thinking inspired a renewed line of *memetic* enquiry that can be broadly described as *epidemiological* in character – that is, a meme that spreads like a biological presence, and should be apprehended in scientistic terms. Richard Brodie's 1996 book *Virus of the Mind*, for instance – which came

with the subtitle "The New Science of the Meme" – is indicative of this move. In this work, Brodie advanced a Dennett-inspired formulation, which saw the meme conceived of as a *mind virus* (distinct from *actual* brain viruses). Brodie's mind viruses were theorised to propagate through every level of society, finding form in the ideas and conventions that they undergirded, with his working definition of a meme being "a unit of information in a mind whose existence influences events such that more copies of itself get created in other minds." (p. 11) Among the infected, were bureaucrats, hippies, the rich, the poor, singers, prisoners, the violent, the pacifists, teachers, children, the happy, and the sad – people demonstrating behaviours, traits, and proclivities that could be coded and decoded, in other words. For Brodie, the spread, wax and wane of mores and habits – expressed as memes – was indicative of culture itself being a form of contagion.

However, taking a slightly different stance to Dennett, and in some ways returning to Dawkins's proposition that recognising memes can assist humans in their fight against them, Brodie also held that contagion can be cultivated or stymied through pointed human intervention. As a demonstration of this, Brodie claimed that he specifically titled his book "The New Science of the Meme" in order to make it sound compelling – and in being compelling, would *infect* the minds of potential readers (which means that by his proposition, this thesis is doing viral work in turn). Claiming that meme mind-viruses "contain compelling messages or memes that grab our attention and persuade us to pass them on" (p. 17), Brodie's aim, while articulated in extremely dated terms, was somewhat emancipatory: his stated desire was to teach people how to resist mind viruses by showing us how to recognise their effects. Brodie himself was not an academic, and in laying his work out in more general, and speculative terms positioned it to resonate within a wider turn in media studies and public relations. Brodie succeeded in this regard, amplifying Dennett's phraseology and inspiring a wave of thinkers who sought to understand the effects of media in epidemiological terms (such as in Douglas Rushkoff's Media Virus (1996)) - an (arguably unhelpful) metaphorical trope which took hold in more general discourses subsequently. Yet, once again, for all the ways the *meme-epidemiologists*' influence exerted on discursive tendencies, a direct definition of how these memes should be understood and measured was not offered.

The Internecine World of Memetics

Despite the popularity and burgeoning influence of memes in popular psychological and media discourses, the endemic failure of memeticists' to define their subject of study ultimately undermined the academic field in which popular forays like Dennett's were rooted. In furthering memetics as a scientistic discipline against which hefty claims were being leveraged, memeticists came under increasing pressure to define how the meme can be accounted for as a unit of measurement, and to provide a heuristic within which these units can be made metrical. Dawkins himself had been rather unhelpful on this point, demurring that the expression of a meme - the tune, the prayer, the bridge - was encountered and reproduced as a result of activity going on within the architecture of the brain (with memes, as described subsequently by Dennett "[enhancing] and [shaping] pre-existing structures, rather than generating entirely new structures." (1995, p. 379)). More, Dawkins had admitted that his claims concerning memetic "replication" were on "shaky ground", given the that in his conceptualisation memes could not be considered "high-fidelity replicators" (1976, p. 194) with the variability evidenced with cultural reproduction, within and indeed central to the association between putative memes and cultural evolution. And while this self-critique was apt, Dawkins' lack of precision around the process of replication involved in memetic evolution also elided an entirely crucial point; namely, what entities, what units, were being replicated at all. All in all, this proposed rubric was nowhere near precise enough for those whose science was empirical; for if this unit was to be the metric – and indeed, the cornerstone – of a new discipline, then it needed to be measurable and testable. That is, it needed to be robustly defined in both ontological and conceptual terms, and thereafter, apprehended within a heuristic.

This quandary spawned two schools of thought in those taking up the mantle of meme scholarship. There were memeticists who, like Dennett, and (in a qualified sense) Brodie, held that the meme existed as a physiological phenomenon inside the human brain. This faction, termed the *internalists* (2015) by Øyvind Vada, agglomerated around the idea that – per Francis Heylighen – a meme "can be defined as an information pattern, held in an individual's memory, which is capable of being copied to another individual's memory" (1998, p. 917). In other words, the internalists considered the meme to be neurologically constituted, held in one mind, and impartible into the minds of others. This conceptualisation, then, suggested that transmission of the meme from human to human occurs post facto of a meme unit being materialised into an encounterable expression of culture. Internalist meme theory perhaps reached its apotheosis in the work of Adam McNamara, who advanced the concept of the "imeme" (2011) - that is, the "internal meme" - and the "e-meme" - the "external meme" (para. 9). For McNamara, the i-meme was composed of the "full set of 'meme-specific' neural connections that enable e-memes to be perceived and transmitted by a communicative motor action in any one of its forms (verbal or gestural)" (2011, para. 11), while the "e-meme" was posited as the external expression this neural activity. McNamara's attempt to utilise memetics in such unambiguous terms within the empirical discipline of neuroscience was certainly ambitious - especially since, as McNamara himself noted, the model he developed was unprovable. This serious omission was indicative of the conceptual shortcoming that dogged the internalists, who could offer little in the way of a rebuttal from those who characterised their work as pseudoscientific. Simply put, if there was no meme to be measured, then any frameworks being proposed were at risk of being both unprovable, and unfalsifiable.

Conversely, there were those such as Derek Gatherer who excoriated the notion of an internal, neurologically-constituted meme unit, and instead advocated for "objective bits and pieces of culture" to be considered as the measurable meme. This would, argued Gatherer, "free [memeticists] from the requirement to chase unobservable entities" (2008, p. 679). The externalists' perspective was summed up in Gatherer's observation that it was not correct to say that "two people who know how to tie a Windsor knot have the same meme" in their brains, since the "neural configurations producing this activity are widely different" (2008 p. 676). Instead, the proposition here was that memes can only be reckoned with, and moreover made analytically useful, when understood as a cultural artefact. Vada referred to Gatherer, and memeticists who furrowed similar tracks – as *externalists*, (2015); that is, scholars who argued that

memes must be understood as materialised cultural phenomena that can be directly observed or measured. For Gatherer and colleagues, the *tunes, ideas, catch-phrases, clothes fashions, ways of making pots or of building arches* or other tangible forms of output were, in ontological terms, the meme. In rejecting the "imeme", *externalists* also sought to free meme theory from "the meme-host relationship", since – as Gatherer put it – "as artefacts and behaviours, [memes] need not have hosts. Indeed, artefacts definitely do not have hosts" (2008, p. 679). That is, if the *internalists* were minded to conceive of memes in terms of adaption, *externalists* championed an approach to memetics that was behaviourist in stance. Yet, while materialised artefacts are indeed measurable, this flavour of memetics needed to convince critics as to why a move to reconsider cultural production – already theorised within established disciplines – in terms of memes was a useful exercise. If it could not, then externalist meme theory ran the risk of redundancy.

The field of memetics that emerged in Dawkins' wake was, in other words, febrile – rife with ambition, and fraught with conceptual conflicts. Indeed, the rift between internalist and externalist memeticists was so deep as to appear irreconcilable – with the schism between these warring blocs becoming contentious enough by the end of the century as to result in a ban on debates about how memes might be defined being implemented at the 1998 Symposium on Memetics (Vada, 2015). Stricken, the unruly discipline of memetics was not to become a unified field – and instead began to reach an impasse as the Millennium dawned. Unable to assert its legitimacy and salience, memetics, for many critics, was condemned as unprovable, or unnecessary (Benzon, 2002; Edmonds, 2002).

So pronounced was this existential crisis, that even would-be memeticists began to participate in critique. Robert Aunger, for instance, plainly stated in his 2002 book *The Electric Meme*, his belief that memetics had not made a compelling argument as to what a meme is, and for not doing so, was facing obsolescence. Aunger himself attempted to reconcile this theoretical deadlock by positing that the i-meme should be accepted as a physiological entity (a "neuromeme", (2002) that can be transmitted through the production of encounter with – and ongoing replication of – cultural artefacts. That is, Aunger inferred that the i- and e-meme were, from an observational point of view, one and the same thing. However, while proposing that that the relationship between the i-meme and the e-meme was the stuff of cultural evolution, Aunger did not differentiate between the raw transmission of information from brain to artefact, and the meaningful modification of artefacts as cultural production takes place – an omission which failed to account for the social both the ways in which cultural production evolves over time, and the forms of meaning making inherent within processes of memetic cultural evolution.

Similarly, psychologist Susan Blackmore strived to overcome the persistent quandary of what a meme was, and advocated for its usefulness as an analytic tool by attempting to synthesise the internalist and externalist positions. One of the most prominent of the early memeticists, Blackmore produced a number of influential works on memes and memetics in the 1990s, including The Forget Meme Not Theory (1999a), Meme, Myself, I (1999b), *The Meme Machine*, (1999c), and The Power of Memes (2000). An adherent to the contentious notion that memes are agentic "cultural replicators", Blackmore – in echoes of Dennett – went as far as claiming that memes play a causal role in the trajectory of human evolution; proposing that the human capacity for memetics was a quality that sets our species apart. Indeed, for Blackmore, human evolutionary theory only made sense when memes as well as genes were accounted for. However, while negotiating this problematic track, Blackmore made a significant move in respect to working up a definition of quite what a meme is. In her influential, if controversial, book *The Meme Machine* (1999c), Blackmore proposed a more precise and nuanced definition of the meme. Here, she suggested that these "units of culture" are not just ideas, but instead should be understood "more properly [as] a form of information" (p. 144).

Expanding this stance, Blackmore argued:

...The meme for, say, the first eight notes of the *Twilight Zone* theme can be recorded not only in the neurons of a person (who will recognize [sic] the notes when she hears them) but also in magnetic patterns on a videocassette or in ink markings on a page of sheet music. (2000, p. 65).

Thus, in arguing that memes, if understandable as units at all, cannot be conceived of as only neurologically configured, Blackmore pointed to a more tangible way for memes to be both identified and quantified. Suggesting that memes are neither discretised as ideas or units of information held in human minds, nor artefacts/experiential phenomena within which this information was encoded, Blackmore advanced the notion that these constituent parts can only properly be apprehended as one and the same thing – as information that is encoded, encountered, re-encoded, and re-encountered. For Blackmore, both the idea of the cultural phenomena, and the materialised abstraction of the cultural phenomena comprise the meme, which locates the meme then as the processes by which cultural phenomena are encountered, interpreted, reproduced, and in being so, become modified over time. Memes, in this perspective, were inferred, rather than transmitted.

Enter The Conceptual Troublemaker

Blackmore's conceptualisation was, I believe, one of the more productive moves from the first wave of memeticist thinkers, and one which points to a line of reasoning this thesis returns to in subsequent chapters. However, Blackmore's advance could not save her field from falling into ill-repute. The attempt to establish memetics as a scientific discipline began to seriously falter in the early 2000s (Vada, 2015) with the *Journal of Memetics* and associated conference and wider discursive arenas going on permanent hiatus from 2005 as the discipline receded from legitimacy. However, the demise of memetics would not of course be the last we hear of the meme. For, over the course of the 2000s, the notion of the meme was beginning to take hold in vernacular circles – specifically in respect to the principal subject of this work: memes as they emerged on the internet.

The term "internet meme" entered vernacular usage from the mid-1990s in the context of what is sometimes called Web. 1.0. First referenced in popular media discourses thanks to a 1996 *Wired* article,

the internet meme, at this time, was a vernacular revisioning of the academic ideas touted by the memeticists; a cultural phenomenon that was shared in social groupings, which in being so, evolved over time. Of course, these memes spread within specific social contexts; those social milieus that emerged in step with early the internet – web-mediated networks, including Bulletin Board Systems (BBS), web forums, and email. Being mediated by such technologies necessarily supplied those early internet memes with distinct artefactual properties – properties of the sort made available via screen interfaces animated by computational affordances; images, still or moving, in various file formats, text, and hyperlinks. And while early internet memes may have had a particular artefact as their "fixed" element (such as the Dancing Baby video clip) or cultural ephemera presented on "single-serving sites" (Kottke, 2008) (such as the Nyan.Cat website launched 2011 which only contained one piece of content: the Nyan Cat animation in a continual loop) these phenomena were intuited more nebulously – as shared ideas, trends, in-jokes, tropes, or social behaviours: the stuff that that circulates on the internet (McKenzie 1996). So, while these early internet memes proliferated, they did so in more diffuse ways, rippling across online communities as jokes, as tropes, as behaviours – referenced, reproduced and remixed over time until they were intuited by collective by communities as a recognisable element of a burgeoning cyber culture.

As Web 1.0 iterated and 2.0 emerged – as domestic ownership of computers, access to broadband increased, as smartphones and wearables rolled out, and as platforms ensured a frictionless experience for those who engaged in social behaviours that were fully or partly facilitated by internetworked digital technologies – nascent *internet memes* remained a constant, and progressively important fixture within web-mediated communities. By the 2000s and early 2010s, the internet meme was increasingly understood to be a *bona fide* cultural phenomenon within and across online communities. Though, perhaps burned by the failure of late 20th century memetics, the emergence of the internet meme initially failed to stir much interest from the academy. As humorously noted by Kate Miltner, even by the mid-2010s, only a handful of researchers were interested in internet memes, and "[furthermore], most of those scholars had to consistently make their case as to why pictures of cats with misspelled captions or videos of New Jersey teenagers lip synching to Moldovan pop songs were worthy of academic inquiry" (2018, p. 412).

Nevertheless, within this small (and, it must be said soon to grow) academic cohort, a variety of incisive approaches to theorising the internet meme were produced. As discussed in some detail later in this thesis, over the course of the 2010s in particular, discourse analysis emerged as a popular framework for theorising these emergent, culturally significant phenomena, with Limor Shifman asserting in 2013 that internet memes should be theorised "from a communication-oriented perspective." (2013a, p. 363). The imperative to apprehend internet memes as discourse made a lot of sense of course, since their emergences were intrinsically tied to interactions playing out across and between online communities. The thinking of Jean Burgess, and in particular her work on "vernacular creativity" as realised in and through digital contexts (2007) was often cited (as in Milner, 2013a) as a touchpoint within influential discourse analyses of the internet meme. Perhaps typified by Ryan Milner's declaration of internet memes *media lingua franca* in 2013, the 2010s saw the consolidation and habituation of communication-oriented analyses of internet memes; the inauguration of a *vernacular turn* in internet meme scholarship.

Much of the scholarship produced under the auspices of a vernacular was as insightful as it was important, addressing as did urgent questions being provoked by the proliferation of memes in various contexts over the course of the 2010s. This saw internet memes conceptualised as slang, as sociolects; as modern-day folklore (Milner, 2013; Blank, 2014; Phillips, 2018), or in respect to its applications within activist movements (Denisova, 2019) or marginalised social groupings (Gal, 2016). Elsewhere, the internet meme's significances and functions within "big P and small p" political concerns (e.g., Szablewicz, 2014; Hristova, 2014; Howley, 2016) including troll campaigns and reactionary turns were evinced (Leaver, 2013; Tuters and Hagan, 2020), while the internet meme's implication in cultural activities such as fandoms (Morimoto, 2017) was of concern to some. Thematic approaches emerged too, with the clear importance of humour in meme proliferation subject of much investigation (see Davison, 2012; Laineste, 2016). For others, the roles memes play in the composition and management of online personae (see Gal, 2016; Coleman, 2011, for examples) and the new forms of sociality arbitrated through the accumulation and loss of mediated *social capital* (Milner, 2013b; Nissenbaum, 2017) became the focus of scholarly

attentions. Internet memes were (perhaps inevitably) recursively studied as elements within viral clickbait of the sort pioneered by internet media companies like *BuzgFeed* and *Upworthy* (Bullock, 2014; Bastos, 2016). Put otherwise, by the end of the 2010s, the dearth that Miltner had previously observed was no more – internet memes, characterised in respect to communications within online communities, were canon. All of which is to say that concurrent to and reflective of the emergence of internet meme studies and the vernacular turn therein, the 2010s saw the internet meme's function and utility as vernacular clarified, explicitly stated – and perhaps over time, presumed.

It is worth noting that internet meme scholars working during this period benefited from research conditions far more conducive than those experienced by the 20th century memeticists. For one, the subject of study within internet meme scholarship handily materialised as digital artefacts which could be readily apprehended, observed, tracked, documented, and measured. Indeed, when compared to the poleaxed forays of their forebears, there was little doubt for internet meme theorists about the validity of their subject which were rendered perceivable as readable artefacts of a kind. Internet memes were evident in the world, doing things – communicative work – within cultural contexts. More, internet memes were both artefacts of use within vernacular exchanges, and object records preserved as digital artefacts, often supplied too with contextual information and metadata ripe for analysis by researchers. Here, the pertinence of the meme's technicity is revealed once more, given that their technical characteristics, as *persistent* phenomena (Papacharissi, 2011) was a precondition for their retention as digital records. As Matthew Fuller put it, internet memes were *monitorable* (2005, referenced in Goriunova, 2013) – and internet memes were monitorable in ways distinctly afforded by their technicity.

And while the monitorability of internet memes benefited academics, it also supplied them with additional communicative utility within social contexts. An internet meme's retention as digital record was of course a precondition for it being recognised as a meme within social contexts – given that internet meme instances needed to aggregate into corpuses in order to become legible as collective singular memes. Their explicit, observable, and persistent consolidation into legible corpuses was of course, the dynamic that rasterised the more diffuse array of early internet into *media lingua franca*, which could then be recursively supplied with evolving and contextually realised cultural significances. The rasterisation of the *stuff* that circulates online into legible internet memes was a community endeavour – and indeed functioned as a way in which internet memes conveyed meaning and arbitrated communications. To be able to "read" the *lingua franca* was both to demonstrate social ability, and to contribute to the legitimation of an array of instances into a legible corpus. By the mid-2010s, vernacular communities had routinely begun to categorise commonly used internet memes into "series" (and in some cases, "sub-series") which share in recognisable traits and themes – what Marino (2015) called *folk taxonomies*. Websites dedicated to meme cataloguing, most notably knowyourmeme.com (launched 2007) both entrenched existing folk taxonomies while providing the means for new "entries" to be confirmed. These endeavours spoke to the explicit significance memes had accrued within internet cultures – as artefacts replete with a clearly understood communicative utility. At the same time, I suggest the sortability of internet memes into folk taxonomies was itself a consequence of the techno-social conditions from which these particular memes emerged, which materialised them in ways that were observable, retainable, and of course, readily reproducible and subject to remix in atemporal and asynchronous manners.

For some scholars, the consolidation of internet memes into a *bone fide* vernacular suggested these capricious cultural artefacts could be regarded as a category of phenomena in their own right. Understood as a form of emergent vernacular, sorted into lexica, and explicitly recognised by and online communities as vernacular, internet memes could, it was argued, be divorced and untroubled by antecedent meme theories and memetics: considered exceptional and discrete, and unencumbered by the unfinished business of the memeticists. Bradley Wiggins (2019) for instance, proposed that internet memes should be considered as an entirely distinct phenomenon – only related to the antecedent concept of the meme by virtue of its semantically drifted nomenclature. For Wiggins, internet memes can and should be viewed in isolation, understood as a genre and mode of visual argument (2019) – a school of thought that will be considered and critiqued further in Chapter Four. It may be argued that application of a sort of conceptual tourniquet around the internet meme is justified in some cases. Conceptualised as a bounded phenomenon, and theorised within a reduced scope, Wiggin's proposition could be a tactic which enables

thinkers to fruitfully engage with internet memes, curing them of their conceptual hangover once and for all. It does make some amount of sense to consider the internet meme discretely, given their boundedness to the internet-as-medium and thereafter the distinctive forms of social practices they are implicated in respect to the specific social milieus that the internet affords. Further, parcellating internet memes as discrete phenomena frees them of the conceptual baggage inherited from the unreconciled thinking of Dawkins, Dennett, Blackmore and company, and reduce the consideration required of antecedent memetics to nothing but a brief namecheck in respect to coinage.

However, I question whether the communicative utility of internet memes fully explicates their phenomenology. Indeed, the ontological reading of the internet meme developed in this thesis troubles such a perspective. Specifically, an ontological reading of the internet meme as techno-socially co-constituted suggests that the tendency in scholarship to determine internet memes to be a form of vernacular might itself be a consequence of the yet-to-be-reconciled phenomena of the meme emerging, well, on the internet. So, while the argument in this thesis agrees that the *internet* is a media array that afforded *internet memes* specific vernacular utility, it also holds that this utility should properly be considered as having been supplied downstream of their ontological unfolding – of instances-and-corpuses – within and from techno-social conditions which afforded the observable, retainable, and reproducible artefacts that became consolidated and legible as a *media lingua franca*.

To be clear, while this work does wish to challenge whether "vernacular" as the optimum orientation for conceptualising internet memes, it does not seek to discount, deny, or diminish their vernacularity. Internet memes clearly have functioned and continue to function as and in vernacular discourses. Rather, I propose that it is the conditions of emergence of the internet meme – that is, the emergence of memes on the internet – that should be considered as a precondition for their vernacular utility. Which is to say that the ontology of memes that emerged on the internet – as arrays of instances aggregating into corpuses, and therein ascribed with aesthetics and affective attributes in ways distinctly afforded by the technics being used in social practices – must be accounted for to understand quite why internet memes

emerge in the way they do, and thereafter be utilised as vernacular phenomena. In such a reading, the explicit and observable vernacularity of internet memes was ratified downstream of their ontological materialisation – as legible corpuses of myriad instances – from their techno-social conditions of emergence.

An Internet Meme Is...

As stated above, the conditions of emergence which render internet memes into retainable digital records are the self-same circumstances that have afforded their ontological reading. In this sense, the emergence of memes within and across the technical assemblage of the internet served to clarify that the term internet meme refers to two related concepts - and in doing so laid bare their characteristic ontology. As introduced at the start of this introduction, and also noted by Marino (2015), the internet meme as a collective singular noun is comprised of multiple individual internet meme instances. It is when numerous meme instances aggregate into a corpus, that they become legible as an internet meme in the collective singular. For precision, throughout this work I will refer to individual meme artefacts as meme instances and aggregations as *meme corpuses* when the differentiation is required between singular artefacts and the collective singular internet meme. Once again, this has salience beyond delineating terminology - and instead reveals an ontology that is a distinguishing aspect of the meme's phenomenology. And just as meme corpuses are only legible when comprised of myriad instances, individual internet meme instances only become recognised as part of a corpus when it is composed in such a way that associates while differentiating it from the wider body of meme instances in circulation. As articulated by Limor Shifman, meme instances ae created "with awareness of each other and share common characteristics" (2013a, p. 367). This ontological dynamic is crucial to pin down for it has a bearing on how internet memes – and indeed the broader concept of the meme - can be understood in phenomenological terms while elucidating how and why they are imbued with such effective communicative utility. The internet memes communicative utility is not explicable without an account of ontology.

Internet meme instances are created *with an awareness* of the larger corpus, with new individual contributions composed to possess some common characteristics, while also possessing a degree of novelty - with either the artefact itself altered to some degree, or otherwise subject to recontextualisation. As such, each meme instance contributed to a corpus will bear aesthetic or affective similarities to wider texts, while bearing signs of modification through having been reproduced (or after mimesis, mimicked) or remixed. And it is through the contribution of new, reproduced or remixed meme instances - that is, the unfolding ontological configuration of instances consolidating into a corpus – that the communicative capacity of internet memes is wielded. For it is by successfully aligning a meme instance to associated corpus that a meme leverages communicative utility; by landing a joke, or alluding to an in-group reference, communicative gestures which are contributed to the expectation of them being encountered and parsed by members of a community collective. This is a complex process. An internet meme instance may materialise in any way that the medium of the internet allows; for instance, as a configuration of text, image, video, sound, or even as a particular gesture of behaviour. The challenges faced when creating or interpreting internet memes are entirely the point and inherent to the successful conveyance of meaning. The communicative impact of internet memes is high-risk, high reward; since the creation, reproduction, or riff of an internet meme intended to be read by audience, real or presumed, is contingent on the reader/s aware of the context imparted by a wider corpus, and indeed, a tacit understanding of a meme's ontological configuration.

Couched so, the ontological configuration of memes is positioned as intrinsically linked to their communicative functions within social practice. For instance, in Ryan Milner's (2013a) morphological reading of memes, which become communicative when new instances include both "fixed" and "novel" elements simultaneously accounts for how they convey meaning and their manner of spread. Drawing on linguist Deborah Tannen's morphology of slang (2007), Milner emphasised the communicative importance of fixity and novelty in reproduction and remix. Fixed elements will recur in meme series (e.g., the Impact typeface, the image featured in a Is this a Pigeon meme, or an idiosyncratic grammatical construction such as LOLspeak), while new meme instances are created with novel inclusions; a new image, punchline, tonal inflection, recontextualisation, etcetera. The fixed elements demonstrate that the

meme instance is related to a wider corpus, which in turn relates to the idea being communicated and explored. At the same time the novel elements – a recontextualisation, a riff or a remix – are indicative of the meme evolving. Thus, as shared ideas, internet memes must be understood as comprising multiple individuated expressions, materialised instance by instance. Internet meme instances should be understood then as, to paraphrase Olga Goriunova, *aesthetic objects that mediate individuation* (2013). They are created and iterated by the individual, made sense of in as they relate to the contributions of a collective. So, while Milner's reading of internet memes articulated them as a form of internet afforded vernacular, inherent to his analysis was an unacknowledged ontological claim: that internet meme instances, undergoing processes of reproduction and remix, become recognisable (and thereby communicative) as internet memes when they aggregate into a corpus.

For Limor Shifman, recognising the specific manner by which internet memes spread was a huge opportunity to place them within a robust heuristic. Writing in 2013, Shifman specifically addressed the theoretical and empirical problems the 20th century memeticists encountered when attempting to utilise the broader notion of the meme as a locus within a viable framework. Conceding that explicating all aspects of communicative, cultural production as memetic compromised the "analytical power" (p. 367) of putative memetics – making memetics effectively tautological – while agreeing that "meme units" remained unprovable, Shifman moved to articulate the internet meme, in more helpful terms. In essence, Shifman refused to try to define an internet meme as any one type of "unit" – such as digital artefact of one sort or another that is used in particular ways – while also erring away from any overly "inclusive" tendencies that would render any framing produced redundant. Instead, Shifman argued that internet memes should be defined in terms of a process; specifically, the asynchronous processes by which memes spread, and transform as they do so. For, in transforming as they spread – as new individuating meme instance contributions are added to the corpus – internet memes achieve both their distinct communicative function, and acquire their specific ontological characteristics.

This argument was immediately helpful, differentiating as it did, the meme from viral content, which outside of being recontextualised does not change as it is replicated (Milner, 2018). Shifman also made clear that the modifications that memes undergo as they are reproduced and remixed can be affected across one or more of three vectors – *content, form, or stance* (p. 367) – that is, a meme instance could be recreated having had its message, format, or tonality amended. As Shifman put it, tonality or meaning was intimated by the way in which a meme was *keyed*. This stipulation made clear that remix is not limited to an internet meme's contents or layout – but that the inference of a memes, including the very manner by which a meme is shared, can intone and infer meaning. By making clear the complex communicative capacity of internet memes – what Grant Kien called "memetic communications" (2019) – Shifman added necessary nuance to the notion that internet memes are digital artefacts that convey a shared idea: The point for Shifman was that internet memes are digital artefacts that convey a shared idea *by virtue of bow they spread*.

A Meme Proliferates!

In apprehending internet memes in this fashion, Shifman's work, synthesised with Milner's morphological account, underwrites a useful and legible rubric via which memes could be understood as distinctly communicative. And moreover, I suggest that the communicative capacity of memes posited by Shifman and Milner emerges from the ontological configuration of a spreading internet meme, which itself is a phenomenon distinctly predicated by the use of internet technics within social milieux. In this thesis, I will advance this position, and use the term *proliferation* to encapsulate the manner of memetic spread formulated by Shifman and Milner, which I reposition as an ontological claim about what makes a meme, a meme, inclusive of its communicative capacities. Internet meme instances asynchronously aggregate into corpuses as communicative gestures are enacted and brokered across and through techno-social conditions of emergence in which the internet is co-constitutive to the meme's spread and expressive capacities. Each internet meme instance is created in awareness of wider meme corpuses, which have been retained, observed, and subject to recursive reproduction by virtue of their technical affordances.

Internet memes convey a shared idea by virtue of how they spread online, from the aesthetic and affective attributed they bear, to the sensibilities, significances and meanings yoked and yielded from the internetworked distributions. A meme proliferates.

By claiming that internet memes proliferate, and that their proliferation renders them distinct, I am arguing that their ontological configuration in key to their phenomenology. Within this, I am also inherently claiming that their communicative capacities are contingent on the technical and social conditions from which they emerge. For, the forms of reproduction and remix, modification and adaption, as those that are afforded by the technics being used within social contexts. Inherent to this, in respect to the internet meme, is the bearing internet technics, and their usages, have on the aesthetic and affective attributes of internet meme instances – produced as individual contributions to a corpus. That is, technical affordances will inform both how an internet meme instance is reproduced and / or modified (including at what scale and pace), and thereafter the aesthetic and affective attributes that convey meaning at the level of the instance and the corpus. These "internet technics" that I so breezily refer to, are of course, better understood as a complex assemblage of technics; websites, apps, browsers, platforms, software, hardware, databases replete with semantic relationships feeding APIs, coursing through the "stuff you can kick" - bare metal servers, cabling, exchanges, modems, messy wires behind your desk. The internet memes that are brought forth from the wont of a person to create or share a meme with others - with proliferation achieved through the social use of an assemblage technical media in contiguous states of flow - stipulates them as products of both social and technical complexity. Of course, for the individual creating or sharing an internet meme, proliferation would not typically occur in cognisance of the full technical assemblage at play. Instead, one or more digital tools or platforms replete with a user interface (such as an image editing tool or a meme generator, profile page, or feed) – will be used to create, share, and encounter internet memes.

As Goriunova identified, internet memes inherit aesthetic and affective characteristics from the technical forms used in their materialisation – from platforms, for instance – with the internet meme instances

produced representing "a processual completion of a set of individuations that brought the architectonics of the meme into being" (2013, p. 66). To borrow now from Stiegler in a targeted manner, this infers that the bringing forth of internet memes should be considered as acts of in terms of *grammatisation* (2010); that is the rendering – or *exteriorisation* – of discrete *marks*, a *gramme*, materialised as digital artefacts, rendered in distinct ways by virtue of the technical and social co-constitution. This is significant, as it infers that internet memes emerge as a *gramme* upstream of being consolidated and recognised as meme instances which have agglomerated into legible corpuses. It is only *after* internet memes become legible as memes that they are explicitly sorted into lexical taxonomies, categorised on cataloguing sites such as Know Your Meme (knowyourmeme.com), and ascribed certain significances within communities and wider discourses. The terms of the emergence of a meme, as techno-socially contrived, are that which afford the exteriorisation of *gramme* – which can only be ratified as memes (collective singular) of whatever valence after the fact.

Considering internet memes through the lens of proliferation implicates technics both in regards to the functions of memes within social practices and the aesthetic and affective attributes they possess. It asserts that any given internet meme instance must be understood as having materialised in ways coconstituted between the technical and the social; for technical affordances at play inform the utilities of the meme in social settings, which in turn gain communicative significances within the social context in which a meme becomes legible. Indeed, apprehending memes in respect to proliferation, considerations of technics are insisted upon. *Internet memes* then, as *products of individuations* brought forth – after Goriunova – from "human-technical" performances (2013, p. 66) are the materialised products of proliferation as realised through the social use of internet technics. Moreover, couching internet memes as *aesthetic objects that mediate individuation* imbued with a recognisable "techno-aesthetic form" (2013, p. 66) – forms which are subject to reproduction and remix within vernacular cultural practices – invites a recovery of technics when considering both how memes materialise and their subsequent effects and contributions to the experience of everyday life. As will be explored in subsequent chapters, such a reading also suggests that internet memes should be recognised as constellation points within (to follow Stiegler once more) a *tertiary memory* (2010), which is iteratively reconfigured in ways specifically coconstituted by the affordances of internet technics. memes shape the experience and interpretations of life-worlds. And as this thesis makes clear, internet memes have not arbitrarily emerged as an online vernacular, or phenomena of existential import. Rather, it argues that *since* memes proliferate, and internet memes must be understood as phenomena that proliferate *on the internet*, the technical and social constitution of internet memes is inherent to the particular processes of ontological unfolding made possible by internet technics. And it is downstream of that unfolding that internet memes are ascribed with the aesthetic and affective forms and functions internet memes that make them legible as such.

Within this premise, the case studies developed and mobilised in this thesis will each expound on proliferation as essential to the internet meme; with proliferation here referring to the asynchronous social practice of reproduction and remix of memes as afforded by the use of technics. Yet while this reading draws on materialism, emphatically, the relationship between the technical and the social as it pertains to the proliferation of memes must be understood as co-constitutive, rather than determined. Indeed, that there are people at the heart of the equation should be considered as a given in terms of the perspective advanced in this thesis - once more, that the technical and the social are irreducible should be taken as read in this thesis³. In respect to the human-technical relations from which internet memes emerge, as recognised by Jenny Davis and James Chouinard (2016), considerations of media affordances can fall prey to deterministic readings that underestimate the agency of users, or rather, their co-constitutive role in techno-social reality building. To account for this, Davis and Chouinard added useful granularity when parsing the terms of media affordance, in identifying that technical media both demand and refuse types of use: the range of affordances possible are delimited by the behaviours allowed – while also requesting, encouraging, and discouraging certain behaviours (2016). Their development of affordance theory properly accounts for the ways that technology co-constitutes interactions based on what it's capable of, and how social groupings make use of those allowances, without defaulting to determinism and the elision of the agency of users. In adding this nuance, Davis and Chouinard recognised the very real ways

³ I also acknowledge that non-human actors may play in proliferating memes (such as bots or the algorithmic disciplines internet users are subject to), though any pointed consideration of the use of non-human proliferation is beyond the scope of this work.

in which media affordances produce culture, without defaulting to determinism – and my use of the term affordances throughout this work is in reference to the definition they produced.

Further, the interrelationship between internet technics and social milieux - people, and the digital platforms and tools that materialise internet memes - locates the internet meme within the crosshairs of a number of contemporary ideological and ethical questions. Most pressingly perhaps, the forms and functions internet memes emerge with and adopt disclose something about the amount of influence certain predominant digital technics. For internet memes, this include large social media platforms which operate as private companies, which, through being intrinsic to the proliferation of memes are become constitutive to the emergence of techno-social life-worlds. Couched so, the proliferation of internet memes into gramme exteriorised through the use of privatised technics is that which becomes codified, taxonimised, and committed to tertiary memories. This implies that there are significant ethical questions posed in respect to how internet memes are techno-socially proliferated, and to what effects. And while internet memes are already associated with such phenomena as misinformation and fake news, the framework furthered in this thesis argues that the epistemic disruptions techno-social internet memes can bring forth are symptomatic of their existential capacity to contour cultural imaginaries. The gestures of creating, sharing, or encountering an internet meme are bound up with questions of power - how the interplay between the assemblages of technologies that comprise the internet conspired to afford the proliferation of the internet meme, and to what end. Here a further set of ideological and ethical concerns are raised, given that the libidinous nature of human communications, when rasterised as data, can be parlayed as an asset to be sold, mined, or otherwise underwrite capital.

Taking The Long View

The observation that *a meme proliferates* also paves the way for a reconciliation of sorts between the internet meme and its troublesome theoretical precursor. For while the 20th century memeticists' may not have always explicitly stated it, their memes, whether *internalist* or *externalist*, were too defined by their

propensity to spread – which is to say, were recognised in respect to their unfolding ontological configuration. Proliferation therefore provides a framework to look beyond the internet meme, and begin to reconcile it to its languishing conceptual forebear through locating proliferation as the essence of the meme, internet or otherwise. Perhaps the most radical suggestion proffered in this thesis is that phenomenon that proliferate via the ontological configuration of instances and corpuses across antecedent or adjacent techno-social arrays to those characterised by the constituting presence of the internet could, via this methodology, be recovered as memes.

It is surprising in retrospect that the specific role that the use of technics – in the form of technical mediation – played within the spread of memes (internal or external) was so little explored by the memeticists of the 20th century. Perhaps dogged by the pressure to identify their legitimating units of measure, the memeticists seemingly paid little mind to how these cultural artefacts were brought forth, materialised, and thus encounterable and reproducible. Yet, if Dawkins had paid closer attention the "shaky ground" he found himself on when contemplating the replication of memes, he might have introduced in his original conception, considerations of media, and mediation. Not in this timeline, as they say. Instead, despite advancing the claim that memes were that through which cultural evolution was realised, and that culture was brought forth, Dawkins and subsequent cohorts of memeticists paid almost no attention to mediation when developing their theorem. This oversight seems rather glaring in hindsight, since the mediality of memes was entirely implicit to the thinking of both the internalist and externalist factions; as either the carrier of a mind virus, or as the process by which a meme-as-artefact is produced. In contrast, explicitly stipulating the meme as phenomena which are mediated, and moreover as phenomena that proliferate in ways that are inherently medial, suggests that readings of memes should be less didactic in the attempt to prescribe a singular unit. Instead, noting that a meme proliferates draws attention to the ways in which myriad arrangements of technics within social milieux brings forth myriad meme types to various effects.

One hand, the project of apprehending *internet* memes might seem to be made more complex by first grappling with how a meme of any type might be defined, since this approach substantially broadens the scope of enquiry. Yet, on the other, the identification of proliferation as the haecceity of a meme suggests that it is *proliferation across given technical and social conditions* will bring forth specific meme emergences distinctly, which in turn produces a framework in which the internet meme can be drawn into relief, and resultantly apprehended with renewed focus. Further, attending to proliferation over form and function has value even when applied within the domain of internet meme scholarship. Leaving aside the project of reconciling more recent internet meme discourses with the thinking of the memeticists, the observation that a memes *thisness* results in its *whatness* is salient when considering internet memes in isolation. As briefly outlined earlier in the introduction, proliferation, and its materialist inclinations accounts for quiddity and differentiation that occurs between memes of a kind, such as internet memes produced in years apart (such as an Image Macro produced in 2012 on 9Gag, and a surreal meme shitpost on Reddit, created in 2020 – both *internet memes* but replete with vastly different aesthetic and affective attributes), or within distinct cultural contexts.

Indeed, in the time taken to complete this study, I have observed uncounted numbers of novel internet meme formats, series, templates, and tonalities emerge, each of which freighted with significances within myriad community contexts, mediating countless acts of individuation. The challenge present in analysing a body of data of such scale and complexity – via either quantitative or qualitative means – is very real. Yet at the same time, this continual unfolding need not be regarded only as frustrating to the development of compelling study; rather, recognising the proliferate qualities of internet memes presents a different angle of attack. Acknowledging that variegations will always be inherent to internet memes *because* contingent iteration is part and parcel of their essence, *because* they are guaranteed to alter their forms, functions, and specific cultural relevancies and significances they are imbued with. Internet memes must always be mercurial *because* internet they emerge in ways co-constituted by ever-developing, always contextual technical and social conditions.

Therefore, if we accept that the proliferation of memes could occur across technical and social arrays configured differently, present in eras contemporary and historic, emerging discreetly or concatenating with each other, then if follows that distinct characteristics of specific meme types may be drawn into sharper relief when the specifics of their conditions of emergence are accounted for. And it is in recognition of this implication that this thesis has taken a *techno-social historical* approach. I am, in essence, advancing a case that couches memes as phenomena that could exist and found proliferating beyond the bounds of the internet. That is, the notion of proliferation developed in this thesis could serve to consolidate *the meme* as a useful concept, to which the *internet meme* relates.

The claim that *a meme proliferates* also then suggests that memes, internet or otherwise, will necessarily emerge in asynchronous ways from and within specific techno-social contexts, and as such techno-socially contingent meme forms will be co-constitutively imbued with points of distinction. The techno-social conditions in which a meme proliferates *must* have a bearing on the form and functions a meme possesses. To borrow from Deleuze once more, I suggest that the contextually realised characteristics – possessed by individual meme instances, and the corpuses they coalesce into – can be understood as the *quiddity*, or *whatness* of any given meme emergence. And while each meme instance or corpus will look different and have different utilities as realised in ways contingent on their conditions of emergence, they remain memes, internet or otherwise– in possession of a *thisness* – because they proliferate.

To make this case, over the course of five chapters, I have selected and expounded a number of memes – internet or otherwise – to serve as case studies, and reconsidered them in respect to their proliferation from contingent techno-social contexts from which they materialised. The memes I identify and examine in this thesis then are phenomena that have both significances in their own right – as phenomena that look a certain way, and do certain things. At the same time, I propose these examples are read as being revealing of what Hito Steyerl might call "their conditions of existence" (2009, para. 32), rephrased herein to account for the historical dynamic of this account as their *conditions of emergence*. Thereafter, memes can concurrently be considered to be analytic devices, apertures, or *cuts* – diagnostic tools through which the

techno-socially realised flow of mediation which precondition the emergence of memes can be regarded. Therefore, the essence of the argument this thesis drives forward is that techno-socially afforded proliferation serves as a framework via which memes can be both conceptually and ontologically understood – which in turn undergirds a rubric via which the distinct emergences of meme forms, internet or otherwise, can be elucidated. Inherent to this is a framework which situates memes as *cuts* – analytic devices – through which the techno-social conditions from which they emerged can be newly apprehended.

Addressing these case studies in a roughly chronological order, this thesis will compile a historic survey, which together considers how memes are contingently co-constituted by the dynamic relationship between the technical and the social. So, while, as my stated approach indicates, the techno-social history I produce is a necessarily non-exhaustive one, it has been designed to comprise strategic examples that attend to a range of discourses, whether major or minor, well-known and overlooked inflection points – contingent moments selected to illuminate diffuse tendencies.

A *techno-social history* of memes seeks to be a contribution to meme scholarship that informs the project of defining what we are talking about when we talk about memes – and in doing so, such an enquiry encourages us to further consider how internet memes are distinct, along with what the significance of these points of distinction may be. And it is also through a *techno-social history* of the meme that this framing also nods to the future, asserting that memes – internet or otherwise – have historically emerged and will continue to emerge in different forms as techno-social milieus continue to iterate.

To develop the methodology of historicisation detailed in this introduction, I have adopted an interdisciplinary approach to compiling this techno-social account of memes. Having consulted a range of primary and secondary materials related to the historic case studies to reassess the concept of the meme and locate its haecceity in ontological – and thereby phenomenological – terms, I move to consider the

contingent and specific ways *the internet* co-constitutes internet memes distinctly. Of course, this theoretical perspective is inherently positioned in respect to the more contemporaneous analyses of internet memes, which too are referenced as secondary materials. Lastly, my imbrication in and ethnographic insight the contemporary techno-society – and therefore exposure to a number of primary – is cited and referenced when appropriate. It is important to be candid and make clear that as an interdisciplinary study, some conceptual terrain will be more shallowly tilled than others. However, in such instances, I hope that pathways for other scholars to explore may be opened up.

It is also worth acknowledging that questions about how memes might be retroactively defined beyond the preliminary approaches detailed in this work are suggested as lines of enquiry for other scholars to pursue. By another stroke, the potential expansiveness of the framing being posited necessitates some thought to be given as to when and from where a techno-social history of internet memes should begin. The juncture I have chosen is the mid-20th century, in the United States of America – a decision I will take a moment to justify, and qualify, starting with some pragmatics.

As an English-speaking British citizen, I am afforded access to both an understanding and lived experience of a range (though by no means all) of Western socio-political effects, cultural referents, mores, and language. These insights would not be as readily available to me if I located this study elsewhere. Indeed, should I have taken the decision to study another cultural paradigm, that too would require adequate justification and framing. Beyond access and experience, the period of study has been selected as a strategic, but by no means definitive example through which my perspective can be furthered. Both limited and complex enough to enable me to fully articulate my case, the dynamics present in mid-20th century United States (US) have representation and specific utilities within this thesis' proposition. Well-famed for its rapid technological and social changes precipitated by the post-war boom (Levinson, 2016) and possessing outsized political, geographical, economic, and cultural influence over Anglophonic digital milieux, with a significant part of this predominance having been manifested in and by the internet infrastructures developed within and by its state and corporate apparatus. This dominance has been facilitated by the extraction of resources – geological and human – into networked infrastructures and praxes, which over the course of decades have rerouted material, informatic, affective, communicative, political, and fiscal flows, which are considered in some detail in Chapter Five.

Importantly, the era of study selected coincides with the age of (media) technical *hyperindustrialisation* (Stiegler, 2014) and with that, social practices and conditions of mediation, realised through techno-social milieu that demarcate the shift from analogical to digital mediation. That the case studies drawn on in this work span from the analogue to the digital aims to uncover some of the ways and significances of this shift; both elucidating how proliferation as process has been differently realised, to different effects, at varying junctures. To explore the span of these auspices, I consider media materialism, historical texts, philosophical perspectives, and political economic theories which are synthesised over the course of the thesis to underwrite the arguments made and recursively, to mobilise their significances.

Therefore, in presenting case studies drawn from the course of (just over) a half-century, and therein identifying meme forms which proliferated in specific, increasingly hyperindustrial techno-social conditions, I aim to advance the claim that memes are identifiable in respect to proliferation, and thereafter illuminate how their proliferation across techno-social configurations brings forth different memes, with different effects; with the memes that proliferate on the internet allows drawn into relief as the thesis develops. And while, since the case studies and histories recovered are Anglophonic – and specifically United States-centric – the account produced in this thesis will inherently be a partial and limited reading of internet memes, my hope is that the principles developed could be productively applied to other techno-social milieux which in turn would draw further meme forms into relief in useful ways, or else position memes as an aperture through which techno-social conditions replete with different parameters could be considered and analysed.

Synopses of Chapters and Thesis Conclusion

Chapter One: Seeds of Doubt – Chapter One will take us back to the 1963 assassination of President John F. Kennedy – and perhaps surprisingly, reconsider the discourses that surrounding the killing and its aftermath as a proliferating meme. In particular, this chapter will pay attention to media artefacts produced by two citizen bystander witnesses to the assassination – a Polaroid photograph taken by Mary Moorman, and Abraham Zapruder's famous Super-8 footage – which were asynchronously reproduced and remixed, and became imbued with an imparted forms of meaning in the wake of the killing. Through tracing how these media materials proliferated across techno-social arrays, undergoing forms of proliferation as they assumed epistemic significances, I will recover Kennedy Assassination discourses as a "precursor" – possessing an ontological configuration that aligns them with phenomena understood as memes in the contemporary moment, merely brought forth via antecedent techno-social conditions of emergence.

Significantly, both the Moorman and Zapruder artefacts depicted Kennedy's moment of death, which ascribed them with significant cultural resonance and meaning, across discourses of legal, vernacular, and conspiratorial contexts. Indeed, these photographic artefacts had much to disclose about the disturbing event they documented, and understandably attracted significant levels of attention from investigators, the media, and the American public as the country struggled to parse the confusing nature of the assassination. As a result, these materials became imbricated in the discourses that deliberated over the event, with modifications to their appearance – and therefore what they were understood to disclose – realised in dialectic relation to their ongoing proliferation. The graphic nature of this imagery is revealing, for despite disclosing with all the realism afforded by photography, neither originary artefact nor their reproductions could maintain an epistemic integrity; rather, the existence of the original imagery and subsequent reproductions – edited, damaged, degraded, altered – only served to undermine the formation of a consensus around what these materials were able to disclose.

In respect to this dynamic, these case studies have utility in respect to revealing how the specific technosocial conditions present in the aftermath of the assassination brought forth contextually realised effects. This was a media landscape of broadcast, print, radio, and reprography, which – in affording and concatenating numerous processes of proliferation, both professionalised and amateur – saw the "instances" within this meme take on particular forms and function in ways realised through the manners in which particular technologies were utilised within social practices. This included being damaged at the hands of technicians, being cropped and colour edited by picture desks, bootlegged by assassination buffs, and purposefully augmented by conspiracy theorists. Therefore, in respect to conceptualisation of the meme being advanced in this thesis, the "instances" that proliferated and consolidated within the ontological formation of the Kennedy meme – as part of the shared idea /cultural event through which the assassination was parsed – are demonstrated not only as vehicles to the formation of meaning, but coconstitutive to it. And since the forms of modification that occurred were as afforded by the social use of technics, the technical assemblage present within the milieux should be properly understood as coconstitutive to the valence of the discourses that emerged.

By undertaking such a task, this chapter will suggest that memes may be considered as phenomena defined by ontology rather than the techno-social conditions from which they emerge with contingent and variegated consequences. In so doing, Chapter One pays attention to the asynchronous ways that techno-social proliferation can imbue memes quiddity – which in turn shape life-worlds, function as tertiary retentions, and shape cultural memories.

<u>Chapter Two: Hail Eris!</u> – Chapter Two will further explore how memes, defined in respect to their ontology, are realised in contingent, techno-social ways, resulting in specific cultural effects, by recounting the history and influence of The Discordian Society. The Discordians were (and remain) a parody religious group founded in the 1960s by two Californian teenagers, Kerry Thornley and Greg Hill. This pair believed that any sense of ordered reality one might perceive was a construct, and they made it their mission to prove their case to others. To do this, they initiated Discordianism, a "religious" practice that

was, in keeping with its name, committed to bringing about discord. They detailed their ethos and methodology into a collaborative text, the *Principia Discordia* (issued in five self-published editions between 1963 and 1975), which served as the faith's "holy book". Written with 'tongue firmly in cheek', the *Principia* encouraged adherents of the faith to sow epistemic discord wherever they could, by pulling pranks, seeding disinformation, and engaging in civil disobedience. Per the terms of this thesis, Discordianism can be considered as a counterculturally affiliated meme, insofar as Discordianism's sought to impart meaning through the proliferation of discord; principally to challenge the perceived hegemonic cultural homogenization of post-war United States. Acknowledging Discordianism's countercultural aim, this chapter will detail how the "religion" took hold across a range of cultural milieux, including alternative media discourses, book publishing, theatrical productions, musical performances, and the production of software and web platforms.

Recounting the history of Discordianism's proliferation will further speak to the framing of memes advanced in this thesis. Additionally, this chapter will introduce a political-economic reading of the meme. This is mobilised in respect to Discordianism traversal from alternative media to more mainstream assemblages of technics. Notably, this chapter will also draw attention to the influence Discordianism imparted upon computer hobbyists, hackers, and cyberculturalists, thereafter diffusing as an aesthetic through Silicon Valley's tech industrialists. Altogether, the account of Discordianism's asynchronous and rhizomatic spread tells a story of contingency – in respect to technics co-constituting memes and the unexpected effects the proliferation of memes can have in the ongoing evolution of techno-societies.

<u>Chapter Three: To See the World as It Truly Is</u>: Chapter Three examines two phenomena that proliferated across the early web in the late 1990s, via fora such as BBS, web-accessed Usenet, blogs, and chat forum: Ong's Hat and Polybius. From a contemporary perspective, both Ong's Hat and Polybius can convincingly be read as (early) internet memes. Importantly however, these phenomena were not consistently referred to as internet memes at the time – rather they were better understood as an interactive game, or Alternate Reality Game (ARG), and an urban legend respectively. As an ARG, Ong's Hat proliferated as a meme as participants engaged in a form of play. In collaborating in roleplay, Ong's Hat players engaged with, by adding content to – and therefore to an extent authored – a work of fiction concerned with interdimensional travel was developed. This was surely a lot of fun – until some participants began to lose sight of the game, and became true believers in the story they themselves were telling. Meanwhile, the legend of Polybius – a creepy, and possibly even deadly – computer game proliferated around the web as hearsay, rumours, mocked up evidence, and arch pantomime, with those encountering the story adding to by feigning corroboration or by attempting to debunk it alike; the inflection did not matter much, since each "instance" of engagement served to proliferate, consolidate, and impart meaning into the wider Polybius corpus, Once again however, not all participants knew whether the story of Polybius was merely an urban legend, or a dire warning. Regardless, with each mention, playful riff, frightened reaction, or sceptical excoriation, the legend of Polybius spread, until it too began to defy legibility.

Both these examples will be recounted to detail some of the specific ways that the early internet proliferated memes, whether named as such or not. Moreover, in recovering memes that proliferated on the internet as *internet memes*, this chapter serves to demonstrate how memes can be recognised in light of their ontological configuration upstream of their materialisation on specific one techno-social array. Put simply, I am suggesting that Ong's Hat and Polybius should be considered memes firstly because they demonstrably proliferated via asynchronous acts of reproduction, riff, and remix, with their emergence on the internet downstream of their ontological configuration. Thus, while duly noting that it is somewhat revisionist to demarcate these examples as internet memes outright, my contention here is that recovering them as memes that proliferated on the internet is entirely the point.

Tracing the techno-social history of these phenomena will introduce to this thesis a consideration of how the internet co-constitutes memes in distinct ways, by virtue of the unprecedented medial qualities of digital media. To this end, the case studies in this chapter will point to some of the fundamental ways in which the internet affords memetic proliferation distinctly, and to what effects. In reference to Goriunova (2013), I will suggest that the memes emerging on the internet are materialised in specific ways, through "systems of human-technical performances" (p. 56). For while the presence of the internet in these memes does not alone define them as internet memes, this technical array as used within social practices did ensure that Ong's Hat and Polybius both realised a range of specific cultural effects. The distinguishing qualities of the internet as technical media – distinct in its programmability (Manovich, 2002) which undergirds the scale and speed of distributed participatory cultures afforded (Jenkins, 2012), and the simultaneity of digital media artefacts emerging as objects of use, and object records that, per Papacharissi, *persist* (2002) and become committed to prismatic, increasingly complex, dynamic (and perhaps unreliable) *tertiary memories* (Stiegler, 2010) – contribute to *internet memes* yoking and yielding specifically realised cultural consequences.

From here, as a *cut*, Ong's Hat will expound how (early) internet-afforded proliferation has distinct epistemic effects, shaping how the world might be perceived by those who encounter certain internet memes, but are unaware of their original context. As an alternative perspective, the example of Polybius will be used to explicate how the ontology of *the internet* brings forth internet memes in specific ways that are related to its digital medial constitution, by affording novel modes of participation and distribution, as well as the retention and ongoing reproducibility – and proliferation – of the meme instances and corpuses brought forth. Thus, while once more exploring the prefiguration of more recognisable manifestations of the internet meme that came about in the subsequent decade, this chapter will also point to something of an inflection point typified in these early memes. Within this point, the specific ontological qualities of the internet combined to achieve a more concrete and widespread confounding of consensus reality: a foreshadowing of things that were to come.

<u>Chapter Four: Reconciling With the Irreconcilable</u> – Following the roughly chronological order of this thesis, Chapter Four will engage with what we might call the *internet meme proper*: those artefacts widely recognised as internet memes in broad public and scholarly imaginaries. Central to the concerns of this chapter will be – as introduced previously – the manners by which internet memes were subject to

analysis as digital artefacts infused with communicative utility. Reconsidering the emergence of the "vernacular turn" within internet meme scholarship, I will apply the techno-social historical perspective developed in this thesis to this moment in meme history, and suggest that the vernacular turn was itself cultivated by the distinct mediality of the internet meme – that it, the techno-social conditions of its emergence.

To make this point I will more fully invoke the thinking of Bernard Stiegler – particularly his notion of grammatisation and the composition and generation of tertiary memory (2010). Positing that internet memes are ontological configurations, which emerge through the use of technics, infers both that internet memes materialise as a form of gramme, and that this grammatisation must be understood as instrumental to the ways by which internet memes adopt vernacular utility. As such, I will propose that the technosocial conditions in which grammatisation of the internet meme could take place therefore need to be accounted for in the formation of any subsequent vernacular analyses of the internet memes' communicative function. Drawing once again on the thinking of Olga Goriunova (2013), I will point to the constituting role of platform affordances in the codification and subsequent grammatisation of memes - which will have a significant if underappreciated bearing on the aesthetic and affective attributes of memes put to use in online discourses. More, in being so contingently realised, internet memes can serve as analytic devices – as apertures to the techno-social dynamic from which they emerge – through which their conditions of emergence can be accounted for. In this respect, this chapter will contend that a techno-social history of internet memes recovers some of the contingent moments that resulted in their grammatisation as vernacular - that is, recovers the technical and social interplays which are constitutive to the life-worlds in which internet memes yoke and yield meaning.

To expound this through case studies, I will first dissect how two popular internet meme formats – the Image Macro and GIF format respectively – emerged through a process of grammatisation as afforded by their techno-social histories. Secondly, these case studies will be mobilised to account for the ways in which technics were constitutive to the consolidation of memetic vernaculars, such as LOLspeak and reaction GIFs. In making these arguments, I aim to clarify how these vernacular forms are imbued with distinct aesthetic and affective attributes afforded by digital technics used in social practices. Further, this chapter will advance the claim that the aesthetic and affective attributes of these internet memes are distinctly *of the internet*, due to the distinctive technicity of the assemblage of technologies that comprises "the internet", which afford proliferation in distinct ways, and to distinct cultural effects.

The case studies in this section proxy for other internet meme instances, each of which are materialised as a consequence of the technics of the internet animating social practices. In proposing that these internet memes have emerged as a result of a range of contingent social and technical circumstances, these examples serve as indicative *cuts*, so suggest that internet meme formats and their vernacular adoptions have encoded within them technical and social developments realised in corollary with iterating internet technologies.

Chapter Five: Money Printer Go BRRR: – The final chapter of this work will apply the framework developed in this thesis in order to consider how the internet memes of the mid-2010s were techno-socially constituted. Having made the case for theorising memes as techno-social, this section will consider the implications of considering the internet meme as it emerged in recent history through such a lens. To this end, I will further a critical argument, and posit that the internet of the mid-2010s was a largely privatised and financialised techno-social array. Through a political-economic, and Marxist-informed critique, synthesised in reference to concepts of media ubiquity (Deuze, 2011), platform capitalism (Srnicek, 2017), and rentierism (Christophers, 2020; Dean 2022), I will consider the internet meme as co-constituted by the extractive dynamics characteristic of a privatised internet, in which usage is, as data, parlayed into an asset. That is, I ultimately propose that the internet meme, as co-constituted by this techno-social array, is an always-already commodity form, immanently foreclosed by capital.

To make this case, this chapter will begin by briefly revisiting discourses pertaining to so-called "meme magic". A phenomenon that afflicted the chronically-online during and in the aftermath of the 2016 U.S. presidential election, "meme magic" positioned internet meme proliferation as a form of "chaos magic", and in doing so correctly recognised the relationship between the ontological and epistemic, while reaching entirely esoteric readings of cause and effect. From there, this chapter will correlate so-called "meme magic" against concomitant discourses emerging in the late-2010s about the putative "weaponisation" of internet memes. While noting the popularity of these terms, I will advocate for a move away from explicating the epistemically upending effects of meme proliferation in terms of "magic" and successful use of "weaponry", and instead develop a reading of the proliferation of memes in this era, and the cultural effects thereof, as the logical expression of a highly mediatized – hyperindustrial – techno-social milieux.

Such a claim invites a political economic of the internet meme. And with this in mind, Chapter Five will move on to consider the "meme economy" - the final case study of this thesis. This internet meme emerged as a form of ironised game play in the mid-2010s, which saw participants ascribing faux monetary "value" to a newly created internet meme format which was pegged to the anticipated popularity of the template. Given the lines of thought developed previously in this chapter, I will suggest the critique proffered by this community was perceptive in two key ways. Firstly, I will suggest that the "meme economists" delivered a critique which foreshadowed subsequent attempts to monetise internet memes through tokenisation and affiliations with cryptocurrencies. Thereafter, I will argue that this community correctly identified the ways that privatised – and specifically rentierist – conditions supplied internet memes with an inherent economic value derived in line with the degree to which they proliferated. To conclude this chapter, I will argue that the proliferation of internet memes through financialised techno-social conditions is an economic act, which generates capital for the owners of internet technics. And once again, I will suggest that the internet meme is a useful analytic device for revealing these conditions of emergence, which I argue, are resonant of Dean's concept of "communicative capitalism" (2009).

<u>Conclusion</u>: I will summarise by stating that the techno-social history developed seeks to contribute to the internet meme scholarship by developing a framework through which they can be understood in relation to their ontological configuration – with a collective singular meme comprising numerous individual meme instances. Identifying the meme as a phenomenon with a *baecceity* found in its particular ontological configuration is to insist that the techno-social co-constitution of the meme is also accounted for when conceptualising these phenomena – for the evolving techno-social contexts from which memes emerge will necessarily be constitutive to the meme forms that materialise – and their cultural effects thereafter., It is rather neat then, to say that the baecceity of the meme will always result in their quiddity.

Attending to the techno-social histories of meme emergences, internet or otherwise, provides a framework via which the internet meme can better understood – for establishing how a *meme* might be conceptualised serves to draw the *internet meme* into relief. Simultaneously, recognising the internet meme as materialised from specific techno-social conditions through processes of proliferation in turn positions memes as apertures, diagnostic tools – cuts – via which their conditions of emergence can be read and analysed. By the time the conclusion of this thesis has been reached, each chapter of this work will have been developed both to construct a techno-social history of the internet meme, while the "meme" case studies expounded throughout will concomitantly recover indicative contingent moments of techno-social interplay present in the conditions of emergence in which they proliferated. An apt concluding point then, is that we must expect memes, internet or otherwise, to continue to proliferate differently and variously, and to different and various effects, from and through the techno-social milieux that are yet to come into being.

Chapter One: Seeds of Doubt

A Line of Sight: A Vector

The scene is flipped, but familiar still.

About three quarters of a low-slung, open-topped Lincoln limousine occupies the mid-ground. Seated with her back towards us is Jacqueline Kennedy. She is suspended within a granulated, monochromatic vista, which renders her immaculate marshmallow pink Chanel suit and matching pillbox hat near-white. Captured by Dallas citizen Mary Moorman on her Model 80A Polaroid camera of (Figure 7), Jackie's pose is one of startlement; mid-reaction, she's leaning to her right side, with her corresponding arm raised and placed, along with her full attention, on her stricken husband sat beside her.

From this perspective, we cannot tell that at the very moment this photograph was taken – 12.30pm C.T., November 22, 1963 – Jacqueline Kennedy was looking at something truly awful: Around one sixth of a second before Moorman pressed the camara shutter, John Fitzgerald Kennedy, the 35th President of the United States of America, had received a catastrophic gunshot wound to his head. By the time the Polaroid had exposed, skull fragments and a large amount of bloody brain matter had been sprayed across the interior of the presidential Lincoln.



Figure 7. Polaroid taken by Mary Moorman, November 22, 1963, sourced from Robin Unger's JFK Assassination Photo Research Galleries

Moorman had been standing next to her friend, Jean Hill, about 15 feet to the left rear of the presidential limousine when taking her photograph. Directly across the road from Moorman, and captured in the far right of her image, we see a man standing on a white concrete pergola. This is local factory owner Abraham Zapruder, pictured using his handheld home-movie camera: the high-end 8mm Bell & Howell Zoomatic Director Series Model 414 PD, with which he shot the notorious footage of the assassination now known as The Zapruder Film. The happenstance of their positions meant that reciprocally, if incidentally, Zapruder was also filming Mary Moorman as she photographed the scene (see Figure 8, below). A fleeting moment, one November afternoon, during which triggers were squeezed, and shutters clicked. Two citizens, each with a personal camera in hand, creating a vector; punctuated by a bullet to a head.



Figure 8. Mary Moorman (in the dark coat, holding her Polaroid camera) with Jean Hill, as seen in Frame 298 of the Zapruder film.

My delineation of such a vector is of course an arbitrary conceit. Moorman and Zapruder were only two of around 32 other citizens who used personal photographic or film cameras at the time of the assassination.⁴ Lines of sight between photographers and their incidental subjects criss-crossed Dealey Plaza that day; each merely a proxy for an unknown number of other vantage points not captured. Yet, for all its arbitrariness, for all the coincidence in play, the placement of Moorman and Zapruder would go on to play a defining role in the aggregate cultural memory formed around Kennedy's assassination and its attribution to cultural memories; fragilely wrought by cameras aimed at a point in space.

However, while the media artefacts produced by Moorman and Zapruder played their part in capturing imagery from the scene of the crime, they certainly did not help to produce a coherent interpretation of the event. Rather, their photographic documentation of the assassination – an event more famous for what is *not known* about it, than for what is agreed upon – somewhat ironically served to intensify the epistemic breakdown that began in the moments after the shooting. And as this chapter will detail, the

⁴ At least two other home movies depicting the moment of assassination were recorded: a 24.5 second 8mm film by Orville Nix and a 23 second 8mm film by Marie Muchmore. Additionally, the assassination scene was captured by several members of the public.

production of media artefacts documenting the event, along with their subsequent proliferation through media and social discourse, led to fractious and discordant – and still unresolved – interpretations of the *crime of the century*.

To further this thesis' theoretical objectives and concerns, the photographic materials that emerged from the Moorman-Zapruder vector and their subsequent proliferation between iterating techno-social milieu will be considered here as a form of meme. In detailing how this set of photographic imagery became subject to reproduction and remix - as they proliferated - within and across social milieux, I will develop a reading of the spread of this imagery and posit is as being definable as a meme due to its ontological configuration - as individual, materialised media artefacts, proliferated instance by instance and accumulating into a legible corpus. In making this case, this chapter also suggests that the artefactual instances and aggregating corpuses emerged in ways that must be understood to be techno-socially coconstituted. From there, I note that both the mode of proliferation afforded and the aesthetic and affective qualities of the materialised "Kennedy Meme", of which the photographic materials of Moorman and Zapruder formed a notable part, in turn brought to bear – and continues to bring about – contested interpretations of the assassination. The shocking and unresolved nature of the assassination of JFK crime, photographic media from the scene of the incident help particular evidentiary import – though as this chapter will recount, managed to disclose diverse and divisive interpretations of the event as these materials proliferated. The driving argument in this perspective contends that the techno-social proliferation of this "meme" was not merely a vehicle for its spread, but constitutive to the (contested) epistemes emergent from the "Kennedy Meme's" ontological configuration.

Therefore, in recovering the Kennedy Assassination as a meme – a shared cultural phenomenon comprised of proliferating meme instances that materialise it, I seek to further this thesis' underlying contention: that memes are phenomenon that proliferate, and in so doing possess a distinct ontological configuration, while materialising in various forms and functions in ways afforded by and reflective of their techno-social conditions of emergence. This position therefore implicitly locates the Kennedy

Assassination "meme" as contingent on extant techno-social conditions – and therefore reflective of the contexts from which it emerges. Of course, the debate around the assassination of JFK rumbles at the time of writing, and shows little sign of abating. As it endures, as a meme, emerging and iterating across evolving and intertwined techno-social milieu, it will continue to disclose something about the conditions that bring it forth. For the purposes of this chapter, the particular techno-social conditions considered are aspects of the US media landscape, with a particular focus on its shape between 1963 and 1975.

Having proliferated and therefore being co-constituted by such milieux, the Moorman and Zapruder materials and reproductions can disclose about their conditions of emergence – as *cuts* which serve as diagnostic tools. In respect to this, I will suggest that the seeming fidelity of the gruesome imagery captured by Moorman and Zapruder was rendered less convincing as a consequence of these artefacts being riffed and remixed in social contexts. As the Moorman and Zapruder materials proliferated across and between official and unofficial discourses, as the original artefacts were damaged, with their reproductions cropped, editorialised or – for some accounts – tampered with, their explicit proliferation can be read as undermining to epistemic coherence, despite the images disclosing representations of the assassination to wide audiences. The charges of faithlessness leveraged at these materials was rooted in having been proliferated – a material lossyness that I will explore in relation to Hito Steyerl's notion of the "poor image" (2009).

An important caveat: despite it being heavily referenced in this chapter, the matter of *who killed JFK* is not under debate. Through a media-historical account, this chapter will deal with the Kennedy Assassination as a strategic example that expounds how media ontologies and mediation outline the emergence of epistemologies, rather than contribute to the complex specifics of the event itself – and how this process is memetic. Given that focus, relatively few words will be spent detailing the historical details of the assassination event itself or its immediate aftermath – which have been thoroughly documented in scholarship and beyond, as well as being firmly lodged in popular cultural memory. However, a timeline will be provided as an appendix to this chapter. Elsewhere, exemplary historical accounts have been produced by Peter Knight (2000, 2007), Barbie Zelizer (1992), and Arthur Schlesinger (2002). The assassination as a cultural phenomenon has also been explored in film, television, art, and literature (See *JFK*, dir. Stone (1992); *Parkland*, dir. Landesman (2013); *Flash*, dir. Warhol (1963); *The Eternal Frame*, Ant Farm (1975); *Libra*, DeLillo (1988)). Such forays have not only considered the recorded details of the event, but the assassination's contested position within cultural memory.

Moreover, I aim for this chapter to historicise the concept of proliferation as it relates to the meme. I do this in order to advance my assertion that memes emerge in ways contingent on their extant techno-social contexts. By recovering the Kennedy Assassination as a type of meme, I am proposing the ontological unfolding of this event within and from evolving techno-social milieux had consequences on how the event was and is understood and thus its assignment to cultural memories. And described in my introduction, the meme is not understandable without considerations of proliferation which is a techno-socially realised phenomenon – which infers that the technical and social contexts in which the Kennedy meme proliferated (and indeed, continues to proliferate) have had constitutive bearings on how the event has been interpreted and committed to imaginaries.

However, given that this chapter's focus is the 1963 Kennedy Assassination and its more immediate aftermath, readers will see little mention of the *internet meme* in what follows. But don't let that fool you: as every good conspiracy theorist knows, everything is connected.

Can You See Him?

A 2016 poll showed that 61% of Americans believed that JFK was shot as the result of a conspiracy (Enton, 2017). In the five decades that have followed the assassination, 42 groups, 82 assassins, and 214 accomplices having been accused of participating in the *crime of the century*.

The "official narrative" of the assassination – as put forward by three letter agencies, courts, governmentinitiated commissions⁵, and some quarters of the press media in the months and years following the event – rather famously contended that Kennedy was not killed as the result of a conspiracy. Deemed responsible was presumed assassin Lee Harvey Oswald, who was said to have been acting alone. Not that this this version of events held for long.

Seeds of doubt about how and why Kennedy was killed root for complex reasons that are well described in dedicated studies (see Knight, 2000; Barkun, 2013, for illuminating accounts of this multifaceted historical moment). Of interest here, is the seeming incongruence of between the Kennedy assassination being so contested, despite it being an incredibly well documented event. Scores of photographic and filmic materials – such as those created by Moorman and Zapruder – were produced at the scene, and dozens of eyewitness accounts collected. Accordingly, much of this primary evidence was used within the adjudicative processes arbitrated by the U.S. Government and its proxies, as culpability for the assassination was deliberated. The first official investigation by the U.S. Government came in the form of the 1963 President's Commission on the Assassination of President Kennedy (known unofficially and henceforth as the Warren Commission, after its Chief Justice Earl Warren). The findings of this commission – the Warren Report – judged that Lee Harvey Oswald acted alone on that November afternoon, issuing three bullets from the sixth floor of the Texas Schoolbook repository, the last of which fatally struck Kennedy in the head – a verdict that was, and has remained, contentious.

⁵ The U.S. Government sought to wrap up speculation as to the nature of the assassination as quickly as possible, in the interest of ensuring domestic stability and to shore up its international reputation.

As is discussed in what follows, the evidentiary photographic and filmic materials produced and collected on the day of the assassination were central to the findings and the critical public responses. A disruptive dialectic emerged within this dynamic. This was because the Commission undergirded many of the claims about Oswald's sole culpability through reference to these (and particularly Zapruder's) materials. These images were deemed both faithful representation of the event, which, in possessing a material locatedness to the scene, and existing in constellation, could disclose in reference to each other information about the scene in Dealey Plaza: where the President's limousine was at the time of the shooting, the reaction of the crowd, the composition of the surrounding area.

Yet, of course, this was only partial representation – snapshots, creating a scene in bricolage, between footage, stills, and photographs of various qualities, ultimately characterised by gaps and uncertainty. Entrenching this faithlessness, was the deterioration of this fragile scene over time, as the array of images that comprised it were cut, edited, damaged, restored, colourised, and otherwise reproduced and remixed.

The two artefacts within this deteriorating constellation considered in this chapter – the Moorman and Zapruder materials – were the stuff of pure happenstance. On November 22, 1963, Mary Ann Moorman had intended to take a photograph of President John F. Kennedy as he passed through her home city of Dallas, to gift the image to her son (Moorman, 2013). Things did not work out that way. Instead, the picture Moorman took at 12.30pm ET captured Kennedy in the moment he received a fatal gunshot to the head. This extraordinarily timed Polaroid, in all its viscerality, immediacy, and proximity, is indicative of what Kember and Zylinska might call "material locatedness" (2012), which undergirded (to borrow from Tom Gunning) its truth claim (2004). Moorman's image – a depiction of the scene, spatially and temporally rooted – a "neat slice of time" (Sontag, 1973, p. 17). And it being so, it was prescribed an evidentiary role, counted among a body of media materials, comprising photography, videos, audio recordings, and eye and earwitness statements – used by police and federal agents as they attempted to piece together the events of that chaotic afternoon. Its most startling disclosure, and the most graphic, were the physical reactions of JFK and Jackie at the moment of the shooting.

The image also documented the surrounding scene – which in turn made clear the position the limousine at the moment of Kennedy's attack – and the small crowd who were bearing witness. This included Abraham Zapruder, depicted in the act of creating perhaps one of the most infamous home movies ever made. By inadvertently creating this vector, Moorman and Zapruder, through with their moving and still photographic media from that day, supplied investigators with means to crosscheck positions of cars and their occupants, theorise bullet trajectories, and put a fast-moving event into sequence. Indeed, their media – alone and in combination – furnished evidence and therefore contributed to official understandings of what occurred on Dealey Plaza that day. Moreover, Moorman's image and Zapruder's film, as both items appeared in the press and other public discourses, were to become representations – what Barbie Zelizer termed *flashbulh memories*, that get recycled across contexts, and over time (2010). These contoured vernacular understandings and cultural memories of the event. These images were Moorman and Zapruder's contributions to the mediation of a killing, and as tertiary retentions, were to become constitutive to the terms via which the assassination of John F. Kennedy would ultimately be interpreted.

Moorman's image contains all the elements now widely associated with the assassination scene: the limousine, Jack, Jackie, police riders, and Zapruder on his pergola, atop the (now infamous) grassy knoll. It is worth stating that the grassy knoll was itself only rendered a mappable, nameable place the day Kennedy died. Today, this much-conspiracy-theorised mound is an established fixture of popular imagination, both for its strong association with the assassination of JFK, and more latterly as an expressive stand-in for any putative nexus of subterfuge. But that the grassy knoll only became known as such by being coincident of media coverage. Perhaps understandably, the spot had not drawn the attention of Dallas residents, let alone referred to in specific nomenclature, until Kennedy was shot in front of it. And it was only named thanks to White House correspondent Merriman Smith (of United Press International (UPI)), who had been in the press pool following the presidential Lincoln that day. Reporting a dispatch to his editor some 25 minutes after the assassination, Smith stated that "...some of

the Secret Service agents thought the gunfire was from an automatic weapon fired to the right rear of the president's car, probably from a grassy knoll to which police rushed." (Zelizer, 1992, p. 83). Soon after, the knoll began to proliferate – repeated in local news and then national news coverage (including in a bulletin by CBS News anchor Walter Cronkite during his second CBS bulletin about the assassination). By the time the presumed assassin Lee Harvey Oswald was arrested, this otherwise entirely forgettable grassy knoll had established a place in the assassination discourse, where it has remained since.

In fairness, Smith had not been the only one to notice unusual activity around the grassy knoll that day. Rather, out of the 104 Dealey Plaza earwitness reports collected, 35 entered testimony that at least one shot fired had emanated from either the grassy knoll or the triple underpass (Meagher, 1966). These rumours proved persistent, even as they contradicted the official narrative emerging from investigators that was duly repeated by the press: that "lone wolf" Oswald shot Kennedy from his sixth-Floor snipers' nest. More confusion was to emerge when, not only the direction of gunfire was called into question, but the number of bullets fired, and thereafter which bullet was accountable for which injury to Kennedy. For also injured in the attack were fellow occupant of Kennedy's limousine Governor John Connally, and bystander James Tague.

This incipient epistemic crisis would only deepen, and perhaps became unrecoverable the moment presumed assassin Oswald was himself slain (on live TV) at the hands of Jack Ruby just two days after his arrest, a killing that denied both the accused and the American public a trial – and a sense of closure. Amid the chaos and narrative slippage then, the relative wealth of photographic materials documenting the attack on Kennedy were ascribed a heightened significance – as a means by which, despite much shock and confusion, the truth could be parsed in (Bruzzi, 2005).

The mechanised capacity of "technical images" (Flusser, 1985) such as these, to render fleeting moments – temporal-spatial instances made material – ensured that Moorman's photograph, in the Sontagian sense,

furnished viewers with a glimpse at the scene. Of course, this cultivated much interest from parties partaking in "authorised" and "unauthorised" discourses alike. In respect to the former, Moorman's image was handled by the police, the press, the Secret Service, the FBI, a civil course, and was referenced, though not reproduced, in the Warren Report (Moorman did not give testimony in the Warren Commission; see Appendix 5 of the Warren Report, 1964). In serving as evidence for these authorising bodies, Moorman's image entered a relatively new canon of photographic materials, preceded by the Daguerreotype, whose disclosures (along with their validities) were arbitrated and assessed in the courts (Mnookin, 1998). In this respect, Moorman's image *as a photograph* was representative of and irreducible from the generalised informational "metonymic" turn of the mid-20th century: a "bureaucratic realism" (Sekula, 1982, p. 460) that saw photographs fetishised as a technologised means of capturing the real *raw historic event* (Hall, 1973).

The evidentiary truth claim borne out of Moorman's image was underwritten by light reaching photosensitive film: a small sheet covered in silver halides (any combination of silver and either fluorine, chlorine, iodine or bromine). Her image captured "a literal energy configuration from the real world" (Levinson, 1997): when her finger pressed down on the shutter light ionised the film's silver halide coatings, converting them to metallic silver atoms. The number of silver atoms on each part of the film was proportional to the light exposed on the image. Jackie's Chanel twinset, the flat edge of the pergola, and the sky were all steeped in silver atoms, with Kennedy's suit, the limousine and the grass of the knoll less so. Before the process was complete, the negative was exposed to light once again. At this intervention, the agglomerating atoms stopped the light from reaching the film. The silver halide elements in the previously unexposed parts of the film were now ionised to produce silver atoms and, therefore, darker colours. As we look at the result, Jackie's pink tweed, the face of the pergola, the sky, are now pale, while Jack's suit, the limousine, and the grass are darker. The scene comes into view.

Moorman's image began to proliferate in the hours after the assassination, when Moorman gave an eyewitness interview to Bill Lord of WFAA/ABC (1963). In this interview, Moorman described her

recollection of the event, including stating that there were "three or four shots" and that she likely took her picture on the first one (when it was more likely that it was just after the third) (Moorman, WFAA/ABC, 1963) . Though the image was not shown in the interview, Lord stated that her photograph, along with "8mm motion picture footage taken at the scene") by Zapruder), was in the hands of the FBI. This newsreel footage was to become evidence of the existence of both Moorman and Zapruder's documentation of the assassination, making it public knowledge that a photograph and a film of the president's death existed.

However, one thing that was not clear from the interview was that Moorman's image is of rather poor quality, and quite tiny (just 2.5 x 3.25 inches, including the 0.375-inch white border that surrounds the entire photograph). Not only was Moorman's Polaroid camera an entry level model, the Polaroid film Moorman used that day required a fixative soon after exposure: a step that Moorman very understandably neglected to properly take that afternoon (Marrs, 2013). As a result, rather than her resulting photograph capturing *a literal energy configuration from the real world*, her original photo – the version that so tantalisingly appeared on TV, chemicals misapplied – only ever existed in a state of deterioration, its once energetic configuration continually dissipating.

In addition to the image materially degrading, it was also subject to cropping and editing as it entered legal and media discourses: being reproduced and through intervention, remixed. This splintering began when James Featherston took a copy of Moorman's image in the Dallas Criminal Court press room. (Featherstone was the court reporter for the *Dallas Times-Herald* who had interviewed Moorman in Dealey Plaza immediately after the assassination, with this interview itself photographed by fellow eyewitness Frank Cancelliere.) The *Time-Herald* shared a photo lab with UPI, who purchased publishing rights to the photograph in the coming days. The *Times-Herald* was the first paper to publish any version of the Moorman image, including it in the November 24 edition. This version of the photograph, known as the "UPI copy" (Figure 9) has become the most recognisable version of Moorman's Polaroid, despite the image being quite heavily cropped – Zapruder, for instance, is not visible in this version. Additionally,

prior to her TV appearance, but after her conversation with Featherston, Moorman had been given her account of events to the FBI and Secret Service, who had taken a first generation copy of the print. In the duplication process, her original image was damaged (with Moorman later complaining that it had been "mutilated" (Marrs, 2013). This reduced the amount of detail in the picture when it was reproduced in the media. Tantalisingly, representations of Moorman's original, unspoiled image are still in existence, as the original was bootlegged before it was damaged. The "Zippo" bootleg (Figure 10) is a photograph of the original photograph, named so due to the inclusion of a lighter for scale. This version was illicitly created by an unknown (likely police) source before it too was picked up by the Associated Press (Thomspon, 2009). As a result, in addition to it having been disclosed that the photograph existed at all, there was a minimum of three versions of the Moorman photograph in circulation at that time, each of different quality, with the editing differently framing the single event all the images captured: truth claims, three ways.

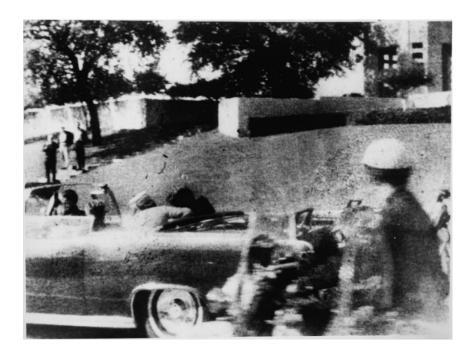


Figure 9. The "UPI" copy of Mary Moorman's photograph, sourced from Robin Unger's JFK Assassination Photo Research Galleries

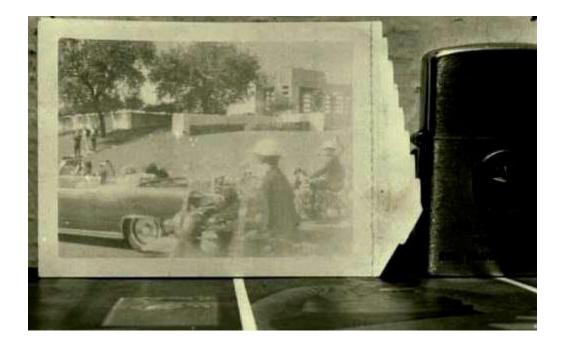


Figure 10. The "Zippo" version of Mary Moorman's photograph, sourced from Robin Unger's JFK Assassination Photo Research Galleries

There is something prefigurative of Hito Steyerl's "poor image" in all of this (Steyerl, 2009). Opening with the claim "[the] poor image is a copy in motion" (para. 1) Steyerl's important text pays specific attention to the role that digitally afforded proliferation plays in *compressing*, *reproducing*, *ripping*, *remixing*, *accelerating*, and thus *creating* poor images: Steyerl was assessing how a distinct form of (digital) mediation and the aesthetic products emergent from it conspired to constitute epistemic effects (articulated through the affective descriptor of poverty). Indeed, Steyerl asserted her poor image to be rooted in a "genealogy of carbon-copied pamphlets, cine-train agit-prop films, underground video magazines and other nonconformist materials" (para. 26). And in noting how the reproductions of Moorman's originary artefact – each in possession of varying degrees of faithlessness – were rendered "poor" copies by means of their entrée into circulation: roughly handled, editorialised, and published on newsprint, bootlegged from the original additional epistemic significance can be found in the "transience of the copy" (para. 23) being explicit and contentious, which in turn degraded the significance of any notion of a singular, truth-revealing original artefact.

One might also imagine that, for Claude Shannon, these deteriorations as "noise" or "entropy" (Shannon, 1948) creeping into every iteration as the indelible and distinct mark of mediation – that is then, of proliferation. Indeed, Steyerl's framing of *images in motion* – those that may be made *poor* through reproduction and remix, and made so in a distinct way, is an adjacent formulation to my claim that memetic proliferation is realised in contingent ways. The contextual lossyness that the Moorman "series" of images underwent was underwritten by their existence in modified multiples. Not only did the numerous versions' coexistence present different sets of visual information, but the uncertainly of each respective disclosure was compounded through their being stipulated as copied/tampered with/damaged/cropped – which is to say, mediated and implicitly remixed. In a practical sense, this resulted in Moorman's image/s provoking curiosity in response to their imperfect repetitions and visible differences. The thumbprint that appeared for instance, has been much analysed in conspiracy discourses, seeing the damage inflicted on Moorman's image as, for example, indicative of an FBI coverup. According to one conspiracy theory, the mark was "strategically placed to cover-up the engaged red brake-lights of the JFK limo during the shots" (Anon, 2013).

Media Disclosures

In the images being stipulated as having been mediated – proliferated – in bearing signs of modification, the Moorman image/s speak of overt proliferation as itself disclosing. In this respect, I propose that these images are indicative of a moment where – due to the degenerating quality of these images caused be proliferation - mediation itself was identified as a substrate for meaning-making; or rather, a substrate for dissensus. That these, purportedly evidentiary materials had been modified, for reasons unknown, seriously undermined any cohesive truth claim they might otherwise have made, and instead insinuated that truth might be disclosed in understanding why they had been modified, and by whom. Evidenced, stipulated, and perceived proliferation then, must too be understood as part of the emergent *gramme* extant to the assassination as it assumed a place within cultural memories – with the contested imagery

that comprised the Kennedy meme not only disclosing through representation, but also through its very mediation; and in being so, a proxy for the battle over (techno-socially wrought) epistemic authority.

In this sense, Moorman's image could only go on to disclose as much about the scene on Dealey Plaza as it could its "real conditions of existence" (Steyerl, 2009, para. 31). It would show the complex, constitutive interplays of mediation that determine how such an image enters discourses, and what epistemological imports are derived from it. Moorman's mediated image, in other words, might have contained the "possibility of meaning". (Sekula, p. 457), but in being explicitly proliferated, any meanings derived were always already undermined. Thus, along with Sekula's *bureaucratic realism* and informational "metonymic" that photographs as fetishised due to their technicity, a dialectic emerged in which the mediality of metonymy could be instrumentalised in order to undermine the very epistemic regimes upon which their informatically-underwritten legitimacy was staked.

Further, while the legitimacy of photographic evidence had been adjudicated in the courts since the late 19th century, the mass-mediated 20th century saw these debates play out within public discourses. This was revealed in stark terms in relation to the Kennedy Assassination – an event lacking an accepted cultural narrative, and in which press and televisual media proliferated imagery which in turn, could be further engaged with within incipient network communities, such as alternative media and newsletter clubs. That is, the Moorman images/s, their reproductions, and the commentary these materials generated proliferated and constituent instances of the wider Kennedy meme. This recovers the Kennedy Assassination and (for the purposes of this chapter) its immediate aftermath – a shared idea recognised in respect to its ontological constitution of multiple instances – as a meme that inherited the form and function in ways contingent on the techno-social conditions of its emergence.

Pick any version of the Moorman photograph shown so far, and look just to the left of the centre point of the frame – to the stairs leading up to white balustrades and into the white-noise created by haphazard halides. What do you see?

Despite this area of the frame particularly lacking in detail – given the photographs small size, its improperly fixed state, and absence of a long lens –a best guess might be that portrayed in that a monochrome speckled expanse, is foliage.

Yet, some have peered into those speckles and seen something quite different: another reality. For example, some those viewers have observed a blotchy shape, in the dead centre of the upper half, taking the form of a man: specifically, a uniformed police officer, holding a rifle, their face obscured by a muzzle flash. They call him "Badge Man". Can you see him? (Figure 11).⁶

⁶ Badge Man was first spotted in 1982 by Gary Mack, a former newsreader and then curator and archivist for The Sixth Floor Museum at Dealey Plaza (the former Texas School Book Depository) – and prominent assassination researcher.



Figure 11. The "UPI" copy with the location of "Badge Man", indicated with black outline

It is difficult to see Badge Man without a visual prompt, at least. The figure is only detectable when isolated from the rest of the frame. Some have gone further still, and have had him blown up, enhanced, outlined, colourised, or otherwise visually emphasised – drawn out, apophenia-like, from a distorted, low-resolution, low-yield portion of the image (Figures 12, 13, 14).⁷ Those looking into Moorman's photograph and seeing Badge Man are not exploring the evidentiary truth-claims committed to photographic paper. They are not even locating meaning in perceived tampering. They are discerning knowledge from epistemic frames that sit somewhere outside this image entirely – ones realised through processes of proliferation.

The emergence of Badge Man could not have happened without proliferation of the Kennedy Assassination meme, engendered by Merriman Smith and the 30-plus eye and ear witnesses on Dealey

⁷ Some independent researchers have been intrigued enough by the prospect of a second shooter being documented, in practically plain sight, to create the scene to test Badge Man's feasibility. These tests have proved that should a man have been captured in the background of Moorman's image, his proportion, as demarcated by the distance between his "badge" and the "muzzle flash", would be improbably small. And even if a man of such a stature had been standing in that spot at ground level, he would not have had a clear line of fire. Which is to say, Badge Man isn't there; at least not in the form of a flesh and blood person photographed while operating a firearm.

Plaza that day. From the actions of Jack Ruby. From the work of the Warren Commission and those who were critical of it, there is an evidently dispersed, rumoured, and persistent belief that a gunman was lurking in the bushes on the grassy knoll: a belief some held onto with such powerful conviction that he was manifested on a deteriorated Polaroid print less than a quarter square inch in size. Badge Man, just like the knoll he sits atop, has been brought about by media. Recalling Sekula once more, "information is an outcome of [a] culturally determined relationship" (1982, p. 455) – an outcome contoured by mediation. And from information comes knowledge, in all its varieties.

The point of this reference is not to debate Badge Man's existence, or quite what the Moorman photo discloses, but to point to mediation's role in determining perceptions therein – then and now, and distinctly. Without Moorman and her Polaroid, Badge Man would not exist at all, I would not be writing about him now, and you would not be thinking about him. He is a phenomenon that has emerged from an ontological configuration, derived of and from proliferation. The point of referring to him is to illustrate how he comes into existence at all – reproduced, remixed, and transformed as he is proliferated, and moreover, summoned into existence in relation to the intransitive mediation of which he is co-constituted. He is based on a real-life event – the shooting on Dealey Plaza, captured as a cut by Moorman on her Polaroid one afternoon. But Moorman's click on a camera shutter is not enough to explain Badge Man, and nor is Badge Man an inevitable product of the media entanglements that have proliferated him. Rather, he is constituted of, by, and through media entanglements – by mediation. That is the real condition of his, and our, existence.



Figure 12. A rendering of Badge Man

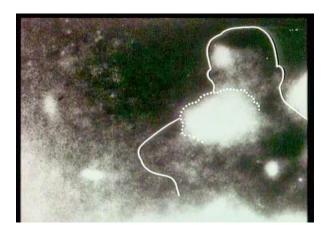


Figure 13. An outlined rendering of Badge Man



Figure 14. An "enhanced" and colourised rendering of Badge Man

Six Seconds in Dallas Six Feet of Celluloid

Moorman's photograph was captured at approximately frame 314 of the 486 frames – or 26 seconds of footage – produced that day by Abraham Zapruder. Zapruder's film opens with Presidential Lincoln driving through Dealey Plaza, seconds from disaster. Zapruder's original film is in colour – Jackie's suit is recognisable as marshmallow pink here – but without recorded sound. The first few seconds show the limousine occupants happily waving at an enthusiastic crowd, trailed by Secret Service detail and police riders on motorbikes. Keeping the President in the centre of the shot, Zapruder's footage depicts Kennedy and Connolly to be in discomfort at around frame 226, with the right side of Kennedy's head exploding into a cloud of pink mist during frame 313 – at 12.30 ET, just as Mary Moorman took her photograph across the street. As Kennedy slumps towards his horrified wife, the car begins to speed out of view.

To say the existence of this film was of great interest to the general public would be an understatement. It is perhaps difficult from a contemporary perspective to appreciate how shocking Zapruder's imagery was, so accustomed are many today to its contents, and to inhabiting a world rich in readily available media content. In addition to the impact the contents and aesthetics of the Zapruder Film's had on mid-century publics, the footage also had an important function, since it was to be parsed as evidence – and indeed as counter-evidence – to the official narrative.

Indeed, rather than being understood as a film that compellingly supported one version of events, or comprehensively undermined an official narrative, the Zapruder footage is today more commonly known as being at the core of nearly every Kennedy's assassination conspiracy theory (Zelizer, 2004). Referred to as the "most analysed" photographic documentation produced that day (Frye, 2019), the Zapruder Film – like Moorman's image – not only functioned in an evidentiary fashion, but as a tertiary retention, also attained a complex importance in cultural memory. It was culturally representative of the assassination

even– and, in the words of Richard B. Woodward, became "fused with one representation, so much so that Kennedy's death is virtually unimaginable without Zapruder's film." (quoted in Holland, 2007, para. 12). Once more, the Zapruder Film acquired this position of infamy dialectically – with the criticism and intrigue pertaining to its contests stoked in line with the footage's centrality to "authorised" discourses, particularly the Warren Report. This tension was further stoked due to the film, for the 12 years after its creation, being withheld from public view as a piece of moving image, and instead only made widely available as a sequence still – and edited – images.

However, things were almost very different. There is a tantalising alternative history in which the Zapruder Film is shown, as a film, on live TV on the afternoon of the assassination. News of the 486 frames first started to reach the public when Zapruder appeared in a live television interview at around 2.10pm – less than two hours after the shooting – on the ABC affiliated channel WFAA TV (Zapruder, 1963). In this interview, Zapruder discussed his eyewitness account of the shooting in some uncompromising detail: "I saw his head practically open up, all blood and everything..." (Zapruder, 1963). He also acknowledged that he expected to have captured the killing in his as-yet unexposed film. Zapruder's interviewer in turn promised viewers that WFAA would broadcast the film once their studio had processed it. Indeed, Zapruder had come to WFAA with the explicit hope of getting his film developed by their studio technicians (Ng, 2013) - not merely to have the film broadcast, but also to allow the film to be used as evidence. Unbeknownst to viewers, Zapruder had also been accompanied by FBI Agent Forrest Sorrels, who was expecting to receive a copy of the developed film for use as evidence. As it turned out, Sorrels, the staff of WFAA, their viewers, and Zapruder himself, were to be disappointed, as the WFAA studio was not equipped to process the Super 8mm film: its epistemic frame - which was so contoured by its rarity and by the ways it was made available - would be differently wrought. Indeed, the assassinations' place in cultural memory may be something quite other than what it is subjectively perceived to be.

Instead, Sorrels and the roll of celluloid journeyed to Eastman Kodak's Dallas processing centre, where it was successfully developed at around 6.30pm that evening. Zapruder was to keep the original, and Sorrels was to get a copy, which required another round of development, as the Kodachrome film used by Zapruder needed a separate process for duplication. To do this, the original print was taken to the Jamieson Film Company across town, where three additional copies were exposed. However, as a result of the duplication process, the interstitial areas of the reel (i.e., those parts exposed between sprockets) were omitted. Additionally, one of the three copies produced was overexposed, while another was under, and one was... just right. And notably, the image quality of all of the copies was poorer than the original - a typical consequence of duplicating celluloid, though one more pronounced during the production of 8mm colour reversal copies, as was required for the Zapruder Film (Frye, 2019). All three copies were then returned to Kodak for processing at around 8pm that evening, with Zapruder keeping both the original and the best copy, and handing the over and underexposed, interstitial-free variants to Sorrels, who sent them to Secret Service headquarters in Washington (Rose, 2013). Eight hours passed, in which the film had been processed and reproduced in an inconsistent and ad hoc manner; as noted by David Wrone, "the original and each copy would have separate and distinct histories." (2003 p. 35). The footage had begun to proliferate.

This process would continue, with the reel being variously reproduced and modified, as moving image, as stills, in a trajectory punctuated by rights clearance agreements, picture desks, and newsstands. The first time the general public were to encounter imagery from the Zapruder Film, was to be as stills, in black and white, in a magazine spread. Once Sorrels had taken leave with his copy, Zapruder was free to do what he liked with the original and duplicate, which were after all his private property. On the evening of November 22, 1963, Zapruder was contacted by Richard Stolley, an editor at *Life* magazine. *Life* had received a tipoff about the existence of the footage from the police (Stolley, 1992) and were eager to purchase the reel from Zapruder. Exhausted, Zapruder asked Stolley to visit his office at 9am the next morning, where he would run the reel. Stolley agreed, but was not the only one to turn up for the viewing: Representatives from Associated Press, the *Saturday Evening Post* (a newsreel), and CBS (represented by CBS Southern Bureau Chief Dan Rather) were also in attendance (Stolley, 1992). Stolley

however, was the first to put an offer in: \$50,000 for print rights to the footage, which Zapruder accepted; a sum was later to be revised up to \$150,000, to include motion picture rights (Podair, 2012).

Life's winning bid was to shape how the film was to be first encountered and understood by the public. Further, ahead of going to print, *Life*'s copy was handled by a technician, which resulted in frame numbers 208–211 being destroyed, and 207 and 212 damaged.

And on top of inconsistencies between originals and copies, proprietary interventions, and material damage, the Zapruder imagery was also to undergo editorialisation. Of the 480 frames remaining, *Life* chose 30 non-sequential frames, printed in black and white to accompany the cover story of the November 29, 1963 issue of the magazine. This was followed by the "John F. Kennedy Memorial Edition", which was issued on December 7, 1963, accompanied by nine frames from the film and printed in colour. In neither edition was frame 313 published – the still that shows the shot to Kennedy's head was captured milliseconds before Moorman took her Polaroid photograph. According to Zapruder's daughter, her father had been disturbed by a nightmare after watching his own film for the first time, where he had walked down New York's Madison Avenue replete with billboards obnoxiously reading "See the President's head explode!" (Ruane, 2013). Frame 313 did make a brief appearance in 1964, when a few copies of an issue released on October 2, 1964 – which contained an editorial in support of the Warren Commission – went to print with the gory head shot included. However, before the run was complete, the presses were stopped, and frame 313 swapped out.⁸

To recap, within seven days of the assassination, the Zapruder footage had been processed, taken as evidence, copied, copyrighted, passed through the copy desk, damaged, and printed non-sequentially and incompletely in a national magazine, with variations of the stills released over the course of the following

⁸ Unfortunately, the newsstand copy is not widely available and could not be referenced directly. Copies of the spiked edition occasionally come up on eBay, and are also catalogued online: https://kennedysandking.com/john-f-kennedy-articles/life-magazine-warren-commission-issue-october-2-1964

twelve months. Like the Moorman image as it proliferated in Steyerlian poverty, the Zapruder footage, in its multiplicities, also became defined by faithless reproduction and discernible differences – and so contributed to a shared idea, the Kennedy Assassination meme, that was characterised by doubt, suspicion, and confusion. That is, what this film could disclose became extended by virtue of the fact that multiple variations had been created, each of varying faithfulness to the original, and thereafter subject to variegated interpretations. Contingency brought the Zapruder visuals and their encoded information forth, as products of shifting ontological configurations and characterised by memetic proliferation – comprising multiple instances bearing signs of reproduction and remix. And once more, each act of proliferation became a seam for meaning-making: teeming with insinuations about what was being concealed or revealed, and why.

If/Then

This single-bullet explanation is the foundation of the Warren Commission's claim of one assassin. And once you conclude the magic bullet couldn't create all seven wounds, you must conclude there was a fourth shot and a second rifleman. And if there was a second rifleman, then by definition there had to be a conspiracy.

Jim Garrison, played by Kevin Costner in Oliver Stone's JFK (1991)

It is perhaps ironic then, that the Zapruder Film, and its truth claims, promised to have unprecedented value to federal investigators. This was not simply due to the clarity with which it captured Kennedy's grisly death, but also the temporal evidence encoded into its material form. Zapruder's reel allowed the Warren Commission to develop their interpretation of the event as they launched their investigation into the killing, metering out, as it did, time through its sprocket marks: the six feet of film Zapruder used in his Bell and Howe camera passed through the device at 18.3 frames per second. This enabled the Commission to gauge that there was a 3.6 second timeframe between Kennedy reacting to his non-fatal

bullet in frame 226, and the fatal one that struck in frame 313. Indeed, this disclosure was to become central to the Commission's contestation that a lone shooter could aim, fire, reload, resight, fire again, reload, resight, and shoot again in the time available – which in turn buttressed their determination that Lee Harvey Oswald had acted alone, shooting Kennedy from the sixth Floor of the Texas School Book Depository. In a Sontagian sense, the Zapruder Film "furnished evidence" (1973, p. 175) in two ways: through what both its visual imagery and technical constitution – its technicity – could disclose.

The Warren Commission had been launched on November 29, 1963 by President Lyndon B Johnson, since Oswald's murder at the hands of Jack Ruby four days earlier had rendered it "no longer possible to arrive at the complete story of the assassination of John F. Kennedy through normal judicial procedures" (Warren, 1964). Thus, it fell to the Commission, rather than the courts, to provide domestic and international audiences with a sense of closure and coherence about Kennedy's death.

It was all a matter of timing. The theory required the Commission to match up the three rounds they believed were fired by Oswald that afternoon to the injuries inflicted on the victims on Dealey Plaza. One of these rounds was easily accounted for – the headshot that killed Kennedy. From the rounds remaining, the commission had to tally up how the two bullets inflicted Kennedy's non-fatal injuries, Governor Connally's serious wounds, and the minor injuries received by bystander James Tague. Since the commission determined that Tague had been injured by a bullet fragment from a shot that missed the limousine entirely and instead ploughed into the curb, the commission were left with one bullet to which they could attribute the range of additional wounds inflicted on Kennedy, as well as those received by Connolly. This was no easy task, given the number of injuries the men suffered: Before being shot in the head, Kennedy had been wounded in the back of the neck and throat (deemed an entry and exit wound respectively), while Connally had been shot through multiple parts of his body and suffered seven wounds in total – on his back, ribs, wrists, and right thigh. So, there were nine wounds, two men, and a "single bullet".

Amid the 3,100 reports submitted by the FBI, Secret Service, Department of State and the attorney general of Texas, materials related to Oswald's personal history, political affiliations and military record, and the testimony of over 550 witnesses, it was the Zapruder Film that held singular importance to the development of the single bullet theory,⁹ (Warren, 1964; Frye, 2019). This showed the limousine and its occupants passing through gunfire at a metronomic framerate. The Zapruder footage established that 18.3 frames were taken each second, and from that baseline, the Commission was able to ascribe timings to key events depicted, as cross checked other available evidence.¹⁰ That is, the Zapruder Footage proved instrumental in the unpopular judgment delivered by the Commission: that that Oswald acted alone in assassinating Kennedy, with the Commission stating that one of Oswald's shots caused all of Kennedy and Connolly's non-fatal wounds. This theory is actually supported by modern ballistics experts: Oswald was using military grade full metal jacket bullets designed to pass through bodies. However viable this theory was, it undoubtedly had poor optics. Thus, for the somewhat unintuitive "single" – or sometimes more derisively, "magie" – bullet theory to land, the workings of the Commission needed to be watertight – both in terms of methodological precision and demonstration of technique. Unfortunately, the Commission failed in both respects.

For instance, and with regard to the latter, within Volume 18 of the 26 volumes of the Warren Report, black and white copies of 35mm colour slide enlargements from certain frames were supplied as evidence for the findings. However, from the selection made for print, frames 208–211 were missing and a splice was visible in frames 207 and 212. Further, frames 314 and 315 were switched around (which was significant, given that frame 313 was the headshot), and frame 284 was a repeat of 283 (as presented in

⁹ From the Warren Report:

[&]quot;More exact information was provided by motion pictures taken by Abraham Zapruder, Orville O. Nix and Mary Muchmore, who were spectators at the scene. Substantial light has been shed on the assassination sequence by viewing these motion pictures, particularly the Zapruder film, which was the most complete and from which individual 35-millimeter slides were made of each motion picture frame" (Warren, 1964, p. 97)

¹⁰ From the Warren Report:

[&]quot;From the timing evidenced by the Zapruder films, there was an interval of 4.8 to 5.6 seconds between the shot that struck President Kennedy's neck (between frames 210 to 225) and the shot that struck his head at frame 813.346. Since a minimum of 2.3 seconds elapses between shots, a bullet could have been fired from the rifle and missed during this interval. This possibility was buttressed by the testimony of witnesses who claimed that the shots were evenly spaced..." (Warren, 1964, p 114).

Warren Commission Hearings, Volume XVIII). The issue affecting frames 314 and 315 was subsequently attributed to a printing error that did not exist in the original Warren Commission exhibits. This may have been so, but the optics were, once again, poor. Regarding the former, the Commission were criticised for an overreliance on the footage in some quarters (Hughes, 2011). The version of the film they had worked with was a copy of the original – once licenced to them by right holder *Life*, and were subsequently open to accusations of deriving evidence from a variant of the original, from a poor copy. Additionally, the charges were levied at the Commission for failing to consider that the sequence shown in the Zapruder Film may have been incomplete (Freund, 1998).¹¹ The Commission's swift work, which was intended to bring about swift narrative resolve around the assassination, inculcated the opposite. This cultivated what Zelizer called a "climate of suspicion" (1992, p. 105). When the report was published, over half of the U.S. public believed that more than one person was responsible for the shooting – a number that was to increase as the decade progressed (Swift, 2013). And the Zapruder Film, as the Commission's prize piece of evidence, was identified as a locus for critical attention – both for how it might refute the Commission's findings, and what else it might disclose about the assassination event (see O'Gorman, 2016).

There is surely something of Sekula's informatic turn in the Warren Commission's dependence on the footage to underpin their theory, an alignment between state and bureaucracy that could be described as a *modernist approach* to jurisprudence (Bauman, 1990). Yet the Commission's reliance on forensic, technologised means, was perceived as hypocritical, and moreover was refutable in the very terms they championed – by parsing and reading against the grain those metonymic materials located as evidence. Indeed, the Commission's findings were easily undermined as incoherent when scrutinised – forensically – by its public critics.

¹¹ The first 132 frames - 7-seconds – of the footage show the motorcade outriders approaching Dealey Plaza, at which point Zapruder stopped recording, to conserve the expensive film. Further, it is plausible that a first shot occurred earlier than proposed by the Commission – about 1.4 seconds before Zapruder restarted filming.

Enter the Buffs

The most motivated of those who countered the official findings of the Warren Commission began to consolidate into networks that were often referred to as conspiracy "Buffs", who were so-named by a somewhat patronising contemporaneous media. The Buffs comprised a growing number of "independent researchers" or "investigators" into the Kennedy Assassination, inspired into action by inconsistencies in press reporting and, latterly, the unsatisfactory conclusion of the Warren Commission. The Buffs might well be referred to today as first-generation Kennedy Assassination conspiracy theorists – although they most often referred to themselves as "critics." (Trillin, 1967). And for good reason.

Though mass media had "[begun] to shape cultural memory of the assassination almost as soon as it happened; the news of Kennedy's death spread to most Americans within half an hour" (Vågnes, 2012, p. 25), a significant aspect of this cultural memory was attuned to narrative incoherence inculcated by media reporting. The press media had encountered some problems in asserting their authority over the assassination event, due in part to a lack of professionally created (and therefore, authorised) imagery of the assassination (Zelizer, 1992). Aside from the Altgen's photographs (produced by professional, but offduty photographer Ike Altgen), few authorised images of the scene on Dealey Plaza existed, because the press had decided not to cover the Dealey Plaza section of the motorcade route. As Zelizer puts it, the media "missed the scoop" (Zelizer, 1992, p. 68), which in turn led some to dub Zapruder as the father of citizen journalism (e.g., Campbell, 2015). To complicate matters, as well as missing the scoop, the press caused further unintended problems for how the event was understood that day, producing uneven onthe-ground reporting riddled with notable mistakes (see Zelizer, 1992; Foley and Lennon, 1996; Parmet, 1990). This included the repetition of factual inaccuracies or speculation; such as Merriman's speculation about the grassy knoll shooter, CBS's report that Vice President Lyndon B Johnson had also been shot, and Lee Oswald being referred to as Leon Harvey on ABC. Elsewhere, muddled narratives emerged when news reporters, and newsreaders, eager for a story, relied on oftentimes contradictory eyewitness statements, with these given legitimacy as a proxy for their absence at the scene (Zelizer, 1992, p. 105).

Once more, the proliferation of the Kennedy meme, instance by instance, was rendered explicit and located as a seam from which myriad meanings could be derived.

The range of interpretations of the event only became more plentiful when the press, perhaps most notably the New York Times, proclaimed Oswald guilty, presuming guilt before trial; and the fact Oswald was denied one by Ruby inspired one of the most influential critics, Mark Lane into action as a result (Lane, 1966).¹²,¹³ Lane was one of many for whom the medial inconsistencies, quirks, and sense of patchiness and incoherence sewed seeds of doubt. As he became something of a figurehead to the Buffs (bolstered in part by his societal standing – Lane was an attorney), a movement of critics began to emerge. Though participation in unofficial discourses, this movement sought to uncover the truth about the assassination via the evidence they had available.¹⁴ They did this by forging a self-organised (analogue) networked community who engaged in a form of crowd-sourced investigations into the Commission's conclusions (Olmsted, 2011). In this sense, the Buffs were participatory in the spirit that Henry Jenkin's ascribed to 21st century fandoms: "born of a balance between fascination and frustration" (Jenkins, 2006, p. 111), with participants motivated to work together in service of a shared aim. In undertaking this critical research as a form of social practice, the Buffs proliferated - memed, if you will - media texts that performed as and underwrote knowledge forms; as gramme. The techno-social environment that the firstgeneration Buffs inhabited was one of telephone, postal service, mimeograph, photography, draftsman's tools, college and community lecture circuits, and (later) print and broadcast media attention. And though this was delimited by contemporary standards and the speed and extent to which these communities could agglomerate, they made good use of what they had. Communicating via phone, posted correspondence and self-published newsletters, the Buffs developed had their own specialised language,

¹² The headline from the November 25, 1963 edition of the New York Times read "President's Assassin Shot to Death in Jail Corridor by A Dallas Citizen" – Oswald had not been tried at the time he was murdered.

¹³ Lane had previously begun to harbor doubts about the official narrative after having read a statement in the Dallas Times-Herald by Mary Moorman's friend Jean Hill (pictured next to Moorman in Figure 8) on November 22, 1963, where Hill had stated she heard a shot from the grassy knoll (Surrey, 1963).

¹⁴ Mark Lane's prominence as a figurehead for "Kennedy critics" had a gendered dynamic; much of the detailed research was completed by women – with housewives able to commit time to assassination research contributing much to a networked "research wing" which was "fronted" by Lane as a legal professional.

pooling, and cross-checking of their findings, which were derived from a range of research activities. These included spending time in Dealey Plaza and simulating bullet trajectories, or driving across the country at their own time and expense to speak to eye and earwitnesses (Olmsted, 2011). In undertaking these activities, they shared and refined erstwhile stigmatised knowledge forms, also making use of technical media and afforded social practices in order to assert evidence-based truth claims of their own.

From 1964, the frustrating inconsistencies in the official narrative would lead many Buffs to turn their critical gaze to the Warren Report – particularly its dependence on the optically-poor single bullet theory. And to critique the single bullet theory, the Buffs needed the Zapruder Film. For the Buffs, the Zapruder footage, with all its promise of truth claims was seen as "a Rosetta stone" (Zelizer, p. 105). This was in no small part a consequence of the footage existing *at all*, given that moving images held a high degree of novelty for contemporaneous audiences.

Without established cultural frameworks for how members of the public might engage with nonprofessionally produced content, Zapruder's "home movie" carried an implicitly gonzo-like inflection. Indeed, at the time, portable cameras, such as the Super 8 that Zapruder used, along with the devices that followed in its wake, such as the Sony Portapak, were more broadly understood as devices associated with guerrilla production processes that were used by artists, and activists – and occasionally families – to circumvent or create materials on terms that existed beyond the professionalized sphere. Patricia Mellencamp has noted that broadcast media, as well as commercial print culture, and "the government, schools, [and] corporations" [...]"embodied product, centrality and homogeneity" and stood in marked contrast to the "diversity and heterogeneity" represented by decentralised, self-published, guerrilla production techniques (Mellencamp, 1988, p. 82).¹⁵ In this context, the Zapruder Film – as an original

¹⁵ Ironically enough, Kennedy had famously favoured TV over print as a means of delivering political messaging, having praised the immediacy of television, while deriding print journalism (referring to journalists as "those bastards!" who, as Kennedy saw it, edited, convoluted, or otherwise distorted the message the White House was trying to convey).

and singular artefact – was differentiated and coded as authentic, by virtue of its amateur and gonzo-like status. Indeed, Zapruder has been called the first "citizen journalist" (Lester, 2018).

The importance of the Zapruder Film to Buffs began to grow as the 1960s progressed. The Buffs' endeavours had become a recursive media sensation – subject to proliferation itself, as mass media tried to reassert their position by reporting with authority on the Buffs' efforts (Zelizer, 1992). Duly, both the Buffs and their critiques of the Warren Report became the story, featuring in *The New Republic* ("Seeds of Doubt", published December 21, 1963), *Esquire* ("A Primer of Assassination Theories" published in 1964, followed a year later by "A Second Primer of Assassination Theories") and, perhaps inevitably, *Life* ("A matter of reasonable doubt: did Oswald act alone?", published 1966). Inescapably, in making the Buffs more prominent, this battle for narrative control had the effect of stipulating the Buffs', and by implication the Zapruder Film's, importance - attracting others to the cause. And as news magazines began to report not only on the assassination but on the doubt present in public opinion over the circumstances of Kennedy's death, the existence of doubt itself became the news story. The Buffs' meme – that the assassination of JFK was in some way shaped by a conspiracy – was going *viral* via the press with their own interests at heart, giving it what Whitney Philip's might call the *oxygen of amplification* (2018).

At the same time, the sequestered Zapruder footage started to leak out. A key aspect of the Zapruder Film's mythology resulted from it having been described – inaccurately, as it turned out – rather than shown on national television (as well as having been editorialised with its frames out of order in *Life*). This was thanks to CBS newsman Dan Rather, who had been his employer's representative in the bidding war of November 23. Despite being unsuccessful in securing the film for CBS, Rather had been able to see the footage in full. Consequently, CBS tasked him to describe what he saw on a newscast televised on November 25. Rather duly did this, recounting that Kennedy *"went forward with considerable violence"* (Rather, 1963), *as well as omitting* certain striking details, such as Jackie Kennedy clambering on to the limo, from his description.

Rather would later call this an "honest error" (Kelin, 2007, p. 484). Contemporary readers will likely know that Kennedy, rather famously, did not obviously move forward after being shot, and instead seemed to move backwards in a "head snap": a reaction that could be explained by the biophysics of neurospasms and blood jets (Freund, 1998) but which seemed to contradict the official account that Kennedy was shot from behind. Here, the differences mattered because, and themselves became stipulated as the site of interrogation, suspicion, and doubt. This rupture, however, would be more fully realised in later years, when the Zapruder Film was shown publicly.

Not content with waiting for that moment however, the Buffs were eager to encounter the footage directly. In the years prior to the footage's public disclosure, Buffs would seek out bootlegs of the Zapruder Film, which had started to surface in the mid-1960s. Fittingly, the availability of unsanctioned bootlegs was itself a by-product of it being proliferated. For instance, in 1967, Life hired New Jersey film lab Manhattan Effects to make a 16 mm film copy of their asset: Zapruder's original. During this process, a 35 mm internegative was made by lab employee Mo Weitzman - the act of reproduction itself here being a remix of an approved mode of practice – who retained the test copies for himself. These reproductions would, of course, by proliferated further. In 1969, Weitzman set up his motion-picture postproduction facility, hiring new staff for it, one of whom was Robert Groden - a noted assassination buff. Later that year, Groden illicitly used one of Weitzman's sets of internegatives and the facility's optical printer to make bootleg versions of the Zapruder film. These included close-ups of the headshot, which went on to enter the whisper networks of critics - informal and semi-secretive groupings that formed around newsletters and lecture circuits. These networks put on private screenings of the film and, according to Don DeLillo "you had to pay somebody thirty thousand dollars to look at it - I think that [was] the going rate" (in an interview with Adam Begley, 1993) – the high price of this encounter reflective of the film's then-scarcity.

A competing bootleg emerged in 1969, thanks to New Orleans District Attorney Jim Garrison. Garrison, a vocal Warren Commission critic, had become convinced that Kennedy had been killed because of a

conspiracy that emerged in his district. Garrison accused New Orleanian businessman Clay Shaw of involvement in a right-wing CIA supported coup, bringing Shaw to court in the only trial launched in respect to assassination culpability – as portrayed in Oliver Stone's controversial *JFK* (1991),¹⁶ which itself, famously licenced – and thus further proliferated – the Zapruder Film. Indeed, due to its loose interpretation of events, *JFK* did its own work to reignite conspiracy discourses.¹⁷,¹⁸

Though Shaw was unanimously acquitted less than one hour after the case went to the jury, the trial did have a number of unforeseen consequences regarding the placement of the Zapruder Film in cultural memory. First, it was a high-profile event, covered in the press media, and thereby further accreting as instances, committed as tertiary retentions. Garrison's critique of the Warren Commission also further amplified the cause of the Buffs (despite many Buffs themselves being critical of Garrison and his working methods and concerned that he would undermine their legitimacy).¹⁹ Second, Garrison subpoenaed the Zapruder footage in order to justify his charge that the single bullet theory of the Warren Report was impossible, and that Kennedy must have been shot by multiple shooters as the result of a conspiracy. Using the Zapruder footage as evidence to prove this resulted in a small section of the American public – the trial's jurors – being shown the infamous film for the first time. Third, and perhaps most significantly (though with less pizazz), the subpoena allowed the Zapruder reel to be handled by further technicians, and additional bootlegged copies were made. Lane himself travelled to New Orleans at this time to get several more copies printed, which he recirculated among assassination researchers and journalists (Culbert, 2010). Contingent proliferation was afforded once again. And this time, the amplification that occurred was to turn into a moment of cultural rupture.

¹⁶ Many buffs were dismayed by Garrison's controversial approach to detective work, which included the administration of barbiturate "truth serums", while others criticised his seeming pleasure in self-publicity (Olmsted, 2011).

¹⁷ According to Avi Selk of the *Washington Post*, Stone's *JFK* pushed Congress to order the release of nearly all assassination documents within 25 years, by October 2017.

¹⁸ For Edward Jay Epstein, writing in the *Atlantic* in 1993, Stone's *JFK* leapt seamlessly and confusingly between reality and fabrication. It "demonstrated yet again how easily pierced is the thin membrane that separates the mainstream media from the festering pools of fantasies on its peripheries." (para. 13)

¹⁹ Garrison had a controversial approach to detective work, which included the administration of barbiturate "truth serums". Other buffs criticised Garrison's seeming pleasure in self-publicity (Olmsted, 2011)

By March 1975, a bootlegged copy of the tape (supplied by either Mark Lane or Robert Groden) made it into the hands of Geraldo Rivera. Rivera became the first to broadcast the footage to a mass audience, doing so on March 6, 1975 during an episode of his late-night talk show *Good Night America*, carried by ABC. More oxygen was to be added to the fire: when introducing the film, Rivera, with a serious demeanour, advised viewer discretion: "this is really very heavy", before showing the footage on a TV monitor located stage right. The soundless footage – which was of noticeably of poor quality – all washed out colours and fuzz – was narrated by one of Rivera's guests: none other than Groden himself, who was clear in his assessment that the fatal bullet came from the front. This sent Kennedy's head, contrary to Rather's – soon infamous – account, into "violent, backwards motion" (Groden, 1975). Groden's voice was only accompanied by occasional gasps from the shocked audience. The film was played twice, once to scale, and then again in extreme close-up. One audible "oh god" was picked up by the boom as the second bullet hit.

After the footage concluded, Rivera ad-libbed that it was "one of the most disturbing things I've ever seen *at the movies*" before going on to fully devote the subsequent section of the programme to a discussion of the film. His points were prescient: Rivera observed that in the twelve years that followed the assassination, once outlandish conspiratorial claims had become more reasonable sounding. Longitudinal and quantitative analyses have indicated that Rivera was correct, with Pew polling showing that the American public trust in institutions dramatically fell away from 1964, never since having recovered (Pew Research Center, 2015). This change in national mood has also been noted by scholar of American Studies, Peter Knight. For Knight, by the time the Zapruder footage aired, "many Americans [held] a conspiratorial worldview [that] came to be taken for granted in the decades following the political assassinations of the 1960s and the revelations about the nefarious activities of government agencies that emerged in the investigations of the 1970s." (Knight, 1999, p 4). Put otherwise, the possibility of conspiracy had been stipulated, and habituated as a given.

Rivera had concluded in his commentary that a satisfactory investigation into the assassination was needed if the psychological wounds inflicted by the assassination were ever going to heal. Sure enough, after Rivera's broadcast, Gallup polling showed that public belief in a *JFK conspiracy* reached an all-time high, with 81% of the American public believing that the president had died as the result of a conspiracy (Swift, 2013). By the mid-1970s, the assassination was intractable from conspiracy in both official and unofficial discourses. As David Wrone notes, this resulted in there being, after a certain point, "such mistrust of the government and resentment of *Life* that any inconsistency having to do with the film could get pulled into the gravitational force of various conspiracy theories." (Wrone, 2003, p. 13).

Knight – and Rivera too – refer in specific terms to the impact of several high-profile scandals that had occurred subsequent to Kennedy's death, such as the Pentagon Papers, MKULTRA disclosures, the Vietnam War, Watergate, and the assassinations of Martin Luther King Jr. and Robert Kennedy – which had further undermined the already waning trust that the American public had in its governing institutions and in the media. Rivera's call was answered. Such was the disquiet caused by broadcast amid a noticeably febrile public mood, that three Congressional committees were formed, including the House Select Committee on Assassinations, which was a critical part of the work of the Warren Commission and did not rule out the possibility of Kennedy having been killed as a result of conspiracy (though the Committee declined to assign any culpability, and that verdict was itself later rescinded). And though the reasons for this erosion of trust, as indicated, could not be deduced as causal to the Kennedy Assassination and its aftermath (or any one scandal), it is possible to read the broadcast of the bootlegged, washed-out copy of the Zapruder Film as a rupture of sorts. It could also be viewed as a moment of deep irony, where a most pervasive homogenous message asserted the existence of heterogenous epistemic possibility.

Given that the JFK assassination is a story without an end and a now perhaps unknowable event, it reveals more about the conditions that it was embedded in, rather the specifics of its own circumstances. In this way, the media histories and trajectories of the Zapruder Film, and the Moorman photograph, are ciphers. This chapter is less concerned with what one film or Polaroid did or did not show, and how many disclosures these artefacts can or cannot make. Instead, its interest tends to the ways in which they, emerged as contingent, medial *proliferating* phenomena. This reading both characterised the Kennedy Assassination as a meme comprised of constituent, proliferating parts, and notes a moment in which proliferations role in meaning-making was stipulated.

Make no mistake, the epistemic rupture realised in the Kennedy assassination is not irreducible to one cause – Kennedy, Moorman, Zapruder, Warren, Groder, Lane, Rivera; 6 feet of celluloid, silver halides, print media, or broadcast specials – but is instead constituted by their interrelation animated in combination. Proliferation, a techno-social process which, in being productive of *gramme*, brings forth forms of knowledge as memes is always realised contingent manners. It in this way that memes can also serve as *cuts*, as apertures for analyses which may reveal to us the ongoing and evolving interrelationship between the technical and the social which conspired to produce them.

Conclusion

Perhaps inevitably, the Zapruder Film, and the Moorman image themselves became subject to, rather than inspiration for, conspiracy theorising. Along with the legitimate question of the Zapruder Film's completeness, some have called into question whether it was authentic at all, or instead a piece of fakery: a "cartoon" (Freund, 1998). Moorman's photograph too has been accused of being both misleading or false or cynically skewed (Mack and Thompson, 2001) while at the same time seized upon in order to prove the veracity Zapruder's work. For some, the Moorman-Zapruder vector was entirely confected. When media and mediation are so full of interpretive potential, what could be more apt than these artefacts proving and disproving each other, all at once? The meme continues to proliferate. *Ce n'est pas l'assasinat*.

I wish to recover the Kennedy Assassination as a meme to advance my claim that memes are a historic phenomenon that emerge in specific ontological formations. In being so, I am claiming that the materialisation of memes, as instances and corpuses will always be contingent on the interrelationship between the technical and the social: Memes proliferate. Further, in respect to this thesis' aim, this opening chapter seeks to provide a context against which the *internet* meme can be set into relief. The techno-social arrangements discussed in this chapter proliferated discourses related to the Kennedy Assassination, which I argue can be recovered as a meme. Such a Kennedy Assassination "meme", explored in relation to the Moorman and Zapruder materials, took on specific material and aesthetics characteristics, and had contextual utilities and effects as a result of its contingent emergence. The Moorman and Zapruder materials and their reproductions and remixes proliferated as instances within a wider meme corpus. And in so doing, the Moorman and Zapruder instances and the wider "meme" they rendered legible must be understood as having taken on aesthetic and affective attributes, and significances to the making and conveyance of meaning in ways afforded by their conditions of emergence.

Internet memes *will* be put into relief in subsequent chapters, as we edge chronologically closer to a focus on this thesis' principal subject. This chapter, and the next, works to set the ground for that outcome. I have sought to consider how the proliferation of various meme forms have conspired to produce understandings of the Kennedy Assassination, and thus consider the (sometimes-overlooked) ways in which mediation conspires to produce knowledges, accords, and discords – or, otherwise, inform meaning making. There is a material-historical dimension to this. It is sport to ask what difference it would have made to assassination discourses if Moorman had clicked at a different time, or if Zapruder had forgot his camera or, perhaps, owned a different model, less resolution, or perhaps one compatible with WFAA studio equipment, or perhaps no damage, or perhaps sold the CBS, or perhaps if Groden did not make a bootleg, or perhaps, or perhaps... Yet this is not solely a question of how the event would be differently understood, but broaching the significance of such media interventions – banal or bombastic, careless, or with intent. This foray questions the implications of media, of mediation, and of being epistemologically generative *at all*: moreover, explicitly stipulated as being so. Thus, while the Kennedy Assassination and the media artefacts of Moorman and Zapruder are the focus of this chapter, with the items subject to a somewhat detailed historical account (and sure enough, the detail included is the point), its aim is to establish the premise that the proliferation that across and between techno-social, is itself a highly contingent process. In this way, the consideration of the Kennedy Assassination as meme is an exercise beyond the recovery of a singular unnamed, antecedent meme emergence; rather, the move to consider the Kennedy Assassination as a meme serves to locate memes as phenomena that are inherently – and unthinkable outside of being – realised by and reflective of proliferation through techno-social conditions of existence.

Chapter Two: Hail Eris!

"Nobody trusts anybody now, and we're all very tired..."

Kurt Russell as R.J. MacReady, in John Carpenter's The Thing (1982)

Agents of Discord

Summer 2016, and discord was afoot. That year's U.S. presidential election cycle had been associated with much of it: its controversial machinations so upending that new language was coined in order to describe, if not identify, the informatic febrility unfolding. There was so-called "fake news" and putative "post-truth", and forms of mediated misinformation abounded. It was a crisis atmosphere, replete with punditry, declarative editorials, streams of reaction GIFs, and piping hot takes. Rumours of shadowy bot activity circulated, cultivating a (perhaps deserved) paranoid atmosphere, with the *algorithm* largely denigrated in social discourses as nefarious manipulator of psyches. People were deemed culpable too – with reports of entrepreneurial Moldovan teens making money through propagating clickbait, and cabals of Russian hackers dead set on upending democratic discourses – and perhaps even democracy itself (see Diamond, 2016 for an indicative example of type of discourse). Newspapers and magazines duly reported on the melee, posting editorials and op-eds, explainers, and essays via their social channels, which would inevitably go on to be liked, shared, and debated by other social media users. Participation in *the discourse* was essential of course, with social media users tapping out #threads, earnest rebukes, caustic one-liners – and internet meme, after meme.

By the mid-2015s, internet memes had themselves become a point of debate. No longer calling to mind cute pictures of cats, if they ever had done so, internet memes had begun to be indicted as "weapons"; put into service within meme warfare (e.g. *The Guardian*'s *Meme warfare: how the power of mass replication has*

poisoned the US election, Haddow, 2016) – that the "left" broadly put, were losing. (Appropriately enough, the slogan "the left can't meme" became an entry in meme catalogue knowyourmeme.com in 2016.) Worse, despite the energy that went into internecine debates about the why's and the wherefores of meme warfare, there seemed to be little agreement in public discourses as to the exact nature of this crisis. In fact, there seemed to be little agreement about much at all. Consensus reality was beginning to dissipate. All the while, the U.S Presidential Election campaigned trundled maddeningly on. For some, the then-presidential candidate Donald Trump was interpreted as a genuine menace, while others dismissed him as unserious blunderbuss for others. His *base* however, regarded him as a *bone fide* saviour. Conversely, his opponent Hillary Clinton was characterised variously as terminally ill, a deluded liberal, and the country's last hope. Discussions of the contentious campaign were fraught, memes were posted, takes were shared, as reporters, analysts, and commentators gleefully (but with due gravity) broke news, and pundits delivered punditry. Within this fevered and disorienting discourse, discordance seemed to proliferate – and prevail.

For some cool heads assessing the situation, the sheer volume of information in circulation itself became the crisis. Described as an impending "infopocalyse" by some (e.g. Ovadya, 2018), the information-rich environment brought forth what danah boyd called a sense of "epistemic fragmentation" (boyd, 2019). By this, boyd pointed to a condition in which the social contract was compromised as a result of publics lacking a shared sense of consensus reality. And for boyd, this sense of epistemic fragmentation had ontological roots; the information being metered into circulation was produced as the desired exhaust of a media environment which was characterised by the mediation of social practices by digital intermediaries that incentivised engagement. For boyd, a pressing concern was how such a contemporary information environment could all to easily be manipulated by bad faith actors. Implicitly however, boyd's analysis of manipulable and fragile consensus reality addressed the relationship between epistemic fragmentation and the techno-social conditions of emergence: for culpable for this recalibrated social milieu were media. Ubiquitous, entrenched, financialised media – which were a precondition to the emergence of seeming *epistemic fragmentation*, which itself was a logical outcome of a techno-social milieu which insists on engagement.

I will consider this political economic dynamic directly in Chapter Five – but for now wish to note that the heated techno-social context of the mid to late 2010s also brought about an inflection point in internet meme scholarship. The imperative to grapple with mercurial internet memes intensified in the wake of the election, with urgent critiques which aimed at understanding the whys and wherefores of "meme weaponisation" and other ways in which memes played a role in medial manipulation the focus of many academic forays (e.g., Ross 2017; Heiskanen, 2017; Woods, 2019). This was of course necessary and justified: in the context of the 2016 U.S. presidential election, internet memes were being utilised by a disaggregate bunch of trolls, fascists, MAGA chuds, united under an agenda of epistemic disruption. Accordingly, it was important to pay critical attention to what memes were doing within these communities, and to what effect. In this respect, I am no meme apologist - and in this chapter I will not be rehashing any ground in respect to the utility of memes made demonstrable by groups of whatever intent during or in the wake of the fractious campaign. Rather, I wish to reassert and further develop my claim that memes of any type are products of the relationship between the ever iterating technological and social – and rather than look at what memes did in respect to stoking discord, provide some genealogical context though which the cultivation of memetic discord can be historicised, and with that, further understood.

I will achieve this by once more, by revisiting a "precursor", in order to draw out how antecedent technics and social arrangement brought forth an equally discordant meme differently. Specifically, I will mobilise a media history of Discordianism – the trollish, puckish, culture-jamming "parody religion" (Chichester, 2005) of the Discordian Society. Discordianism was first inaugurated as an in-joke between two teenagers – Kerry Thornley and Greg Hill - who hailed from Whittier, California. Though now a global subculture, Discordianism started out as an in joke between Thornley and Hill, and a small circle of their friends in the late Fifties. It was just one element of a certain countercultural sensibility present at the time – think the Yippies, Weather Underground, WITCH, Western Esotericism, and Discordian-inspired Church of the SubGenius – who shared an interest in media and culture jamming. The principal philosophical concern of the Discordians was the social, and spiritual, function of epistemological discord, particularly in relation to how what was perceived as reality by publics was vulnerable to disruption. And they explored this interest by... well, wreaking havoc.

Hill and Thornley became devotees to their cause and spent the rest of their lives spreading the good word. This began when they committed their musings on this issue to print – in the *Principia Discordia*, which was authored collaboratively by the pair in the late 1950s. The first full draft of this text was completed in 1965 and self-published with the full title *The Principia Discordia or How the West Was Lost* (1965) – issued as a mimeographed edition of five parts, before being self-published a further four times in remixed editions before the decade was out. The Discordian movement gained in profile as the *Principia* proliferated and attracted new followers, who were in turn provided with some practical advice on how to observe the faith – namely by engaging in media pranks, trolling, and hoaxing, or any such high jinks that would disrupt the epistemological reality of those subject to them. In this sense, Hill and Thornley were perhaps like Kember and Zylinska, acknowledging the inseparability of mediation and reality (2012), with Discordians encouraged to actively cultivate epistemic discord as something for the uninitiated to encounter as a jolt shaking them out of their habituation within always already-mediated social realities.

By recounting the proliferation of Discordianism in the 1960s, this chapter provides an account of how techno-social realities are both productive of, and recursively shaped by, memetic proliferation. Characterising Discordianism as a form of meme in respect to its proliferation through cultural imaginaries, this chapter will conceptualise Discordianism as a "meme" that emerged from countercultural communities, before becoming reproduced, remixed, and otherwise amplified within more mainstream cultural circles, including literature, music, theatre, and the arts. Perhaps inevitably, this history will culminate in reference to Discordianism's proliferation online and its explicit and tacit influence within early web and cyber cultures. By tracing this history, the instance-by-instance iterations of the *Discordian meme* corpus – in which, the only "fixed" element was the impetus to proliferate

epistemic discord – will be considered in respect to their relationship to the techno-social conditions of their emergence. As such, Discordianism exemplifies the dialectical relationship between the ontological configuration of a meme and its variable and contingent aesthetic and affective attributes imbued when materialised. Further to this, the Discordian meme also serves to reveal ways in which the proliferation of epistemic discord too is supplied with significances contingent on the techno-social conditions in which it emerges.

To this end, towards the end of this chapter, I will pay particular attention the Discordianism role in influencing cyber and hacker cultures of the 1980s and '90s, and the role in played in shaping the code, culture, and legislature that shaped of the early internet and web – particularly Discordianism's influence on the share alike mentality of hobbyists, which in turn provoked an antagonistic reaction from the proprietorially minded techno-libertarian class emerging in Silicon Valley. Ultimately, I will conclude by positing that the history of Discordianism is entwined with the emergence of contemporary media conditions in which epistemic discord has a political economic dimension - insofar as the rendering of content of whatever quality, and the recursive loops of attention such content attracts, are gestures which operate through and in service of market forces. In this respect, the techno-social history provided in this chapter also serves as context for the key concern of Chapter Five: whether the internet meme should be properly considered a commodity form.

Ha Ha... Only Serious

"IT IS MY FIRM BELIEF THAT IT IS A MISTAKE TO HOLD FIRM BELIEFS."

- From the Principia Discordia, n.p., 1965

California, USA, 1963, and discord was afoot. About six years earlier, two teenagers, Greg Hill (1941– 2000) and Kerry Thornley (1938–1998), had stuck up a friendship. They had bonded over a shared interest in politics, poetry, philosophy, pranks, and the then-nascent contemporaneous counterculture. According to their archived correspondence, the pair would spend a lot of time at the local all-night bowling alley talking about their pet subjects, and otherwise jerking around over cheap coffee (Robertson, 2012). And it was during one of these late-night hangouts, in or around 1957, that the pair first conceived of Discordianism. Most frequently labelled – and sometimes dismissed as – a "parody faith" (Mäkelä, 2013), Discordianism has been described by Carole Cusack as the world's "first invented" religion (2016) and is reputed to be a belief system oriented around the worship of chaos. Its origin story is suitably absurd: the religion sprang into being during one of the pair's nights at the *bowlerama*, where much to their surprise, they encountered a vision of Eris, the ancient Greek goddess of discord, in the form of a chimpanzee. It was there, hovering above the bowling lane, that Eris delivered the revelation that would form the fundament of Discordianism: that neither order nor disorder exist, and the fundamental state of being is one of chaos (Hill, 1965).

It was perhaps more probable that the moment of revelation was somewhat more down to earth, with Kembrew McLeod suggesting that the concept of Discordianism came about as the friends bantered about the psychocultural significance of chaos, which morphed into a decade-spanning project (2014). However initiated, Thornley and Hill's interest lay primarily in the potential that chaos had in disrupting the established – and to their minds, constraining – social order of the post-war boom years, with this manifesting itself in the nuclear family, commercialisation, mass media, and big government. Eris then, was a cypher, and Discordianism a means by which their critique could be organised: as a parody religion that worshiped Eris Discordia. In so being, Discordianism was also a recursive parody that mocked the notion of trying to even concretise such a conceit. It was only right therefore, that Thorney and Hill produced an anarchistic religious text for their incipient faith, collaboratively drafting *The Principia Discordian, or, How the West Was Lost*) in 1963: the "holy text" for Discordians

(Cusack and Norman 2012; Gorightly, 2014). The first complete edition of the *Principia* went on to be issued in 1965. This was self-published on a mimeograph, under the pen names Malaclypse (The Younger) or Mal-2 for – aka Greg Hill – and Omar Khayyum Ravenhurst – aka Kerry Thornley (Hill, n.d and described by Asbjørn Dyrendal in 2014, p. 210). This text was an "anarchic, mock scripture", putting into writing the fundamental Discordian belief that order is a human construct, and that chaos is the true nature of reality. Awareness of Discordianism grew as the *Principia* proliferated through and between the countercultural alternative media, and underground press discourses. This led to it gaining an honourable mention in the influential "zine *The Rag* via its "Letters" pages and an appearance in the *East Village* on June 4, 1969 (Cusack, 2016, p. 186). From its inauguration, the *Principia* was able to proliferate more widely because the technology was in place for it to do so, and there was a social scene around reprographics – alt media – which cultivated and furthered its spread. It emerged, in other words, and was co-constituted by its techno-social conditions.

Yet, while assuming a place within the burgeoning alt media scene, the *Principia Discordia* was, and remains, a strange document. This was because, though it contained a consistent message – that chaos is the fundamental state of reality, and the acknowledgement of that fact is the key to achieving an elevated and freed state of consciousness – the *Principia* was written in a way that made this doctrine purposefully hard to parse. The *Principia* did not stipulate itself to be either satirical or prankish, but it also possessed a ludic quality that inferred that what was being claimed was not quite serious. For instance, instead of *dogma*, the text contains a list of "catma", representing a rejection of standardised practices, religious or otherwise. It also was riddled with ambiguities, such as the claim that "[the] Discordian Society has no definition... If you want in on the Discordian Society then declare to yourself what you wish do what you like and tell us about it or if you prefer don't" (n.p). This rhetorical ambiguity was indeed a constant characteristic of the text, which moved with ease between arch irony, ludic seriousness, and lucid sincerity, aping institutional language throughout. Such an approach allowed Discordianism to simultaneously reject social and institutional structures, while having an ecclesiastical set-up of its own (one where every person was deemed a pope). It decried the imposition of structure by authorising bodies, while asserting its own key tenets ("A Discordian is Prohibited of Believing what he reads" and

"We Discordians must stick apart" (n.p.). It mocked doctrine while emphasising the importance of its own (knowingly ridiculous) religious fundaments (dubbed the "Pentabarf" and associated "mysterees") parables invoking ceremonial hot dog buns (Hill, 1965). These seeming contradictions were of course the point: the *Principia's* agonistic approach to reader engagement was representative of the work's key subject matter of chaos and – per their argument – through its embrace, enlightenment and salvations through nonsense. This was *ha ha, only serious stuff*.

The *Principia* was not only documentation of an ethos. It also prompted those who may have wished to become a new adherent for action. Appropriately enough for this thesis' concerns, Discordianism recognised that mediation constitutes that which is experienced of (techno-social) life-worlds – with their response to this condition being a call to disrupt in order to experience something revelatory and divine for adherents, and those who were yet to break out of their *reality tunnels*. New followers were encouraged to instigate "Confusion Contests" (1963, n.p.) for the uninitiated, or other such acts of "guerrilla ontology" (n.p.) – forms of culture jamming which were gestures designed to show, rather than tell everyday folk that their experience of the world was but a construct. In both reproducing the form, contents, and stance of the *Principia*, Discordians spread their puckish worldview and doctrine. That is, Discordians had the fixed ambition of proliferating discord, and enacted proliferation in novel ways.

In this respect, Discordianism fits Shifman's delineation of the meme – insofar as Discordianism fixedly sought to actively and purposefully spread discord through reproductions and riffs of its concerns across one or more of the constituting vectors of *contents, form, and stance.* The numerous artefacts spread by Discordians – what we may consider meme instances – whether replicated via mimeograph or message board, coalesced into a wider corpus – what we may consider the Discordian meme. Moreover, I argue that Discordianism meets the ontologically-rooted definition of a meme I have developed throughout this thesis so far – with proliferation the characteristic through which Discordianism's "meme-ness" is derived. Read as a proliferate meme, Discordianism serves as a useful case study to further consider how mediation within techno-social conditions afford proliferation in distinct ways, with distinct effects.

Discordianism is a meme not because of what aesthetic characteristics or utility it possessed, but because it proliferated. And Discordianism proliferated in ways afforded by, and reflective of, its techno-social conditions of emergence.

Print, praxis, and politics

In the years following the publication of the fourth edition of Principia Discordia in 1965, the Discordian meme, proliferating in print and in practice, was given a formal title: "Operation Mindfuck" (Shea, 1975). Operation Mindfuck was named by Thornley and Hill in part as a result of their correspondence with writer and sometimes-collaborator Robert Anton Wilson. (Gorightly 2003, p. 147). The term described the effects and ambitions of engaging with the Principia and described the range of activities involved when adhering to Discordian doctrine: civil disobedience, performance art and other guerrilla techniques for spreading the good word at local or national scales. This involved the distribution of postcards of cryptic scrawl in phonebooths, making somewhat provocative statements; such as proclaiming on one side that "There is no friend anywhere", and the opposite, "There is no enemy anywhere", on the reverse (Cusack 2011, p. 40). Or enthusiasts might have tried a national lampoon – such as that launched by Wilson when he published falsified conspiracy claims among the regular readers letters of *Playboy* (Greer, 2016), thereby amplifying the Discordian meme at a national scale. The aim was true to the text - to test the epistemic tolerances of the public, and find the limit of what was believable, in order to drive home the suggestion that very little should be considered so without the engagement of critical faculties. Operation Mindfuck then, was the practical realisation of Discordian doctrine - to memetically proliferate discord by riffing on the call to disrupt and confuse by engaging with tactics of media manipulation.

And while putting cards in phone booths might sound mild by today's standards (should one even be able to find a phone booth in which to pull such a stunt), we must remember the historical context where these activities occurred. The predominant public mood that had begun to manifest in US society in the late 1960s and early 1970s was one of paranoia and conspiracism. The possibility of conspiratorial activities within institutional bodies began to become habituated in the wake of the Cold War (Knight, 2000) and the Kennedy Assassination, with a growing concern about the *paranoid style* of American politics (Hofstadter, 2012) developing around the influence of fringe groups, especially those that were right wing, including the Christian right. Regarding paranoid thinking, the Discordians skated close to the line. One might assume that the Discordians would be admirers of such a paranoic mindset, given that many of their activities aimed to inspire discordance and the destabilisation of set beliefs. But that was not the case. Rather, Discordianism considered belief in conspiracy to be risible, since believing in an organized conspiracy inferred that its participants were idealogues, who believed in something.

Instead, the Discordians wished to disabuse the conspiracists, religious acolytes, and paranoiacs of their naivety. In particular, they went out of their way to mock the right-wing John Birch society within the Principia. Members of the John Birch Society held a complex belief system - viewing the hippie movement of the 1960s as a conspiracy, or a consequence of mind control, or both - and had begun to rail against the big government of the New Deal era, reviving anti-Semitic tropes about Jewish bankers, along with blood libel, the New World Order, and the Illuminati. This was anathema to the Discordians. Aiming to disavow the public of conspiratorial thinking such as this, editions 1 - 4 of the *Principia* Discordia pointedly co-opted the conspiratorial aesthetic developed by the society. Hill and Thornley specifically couched Discordianism as an agglomeration of cabals and secret networks, with affiliations to the Illuminati, as the John Birchers suspected or purported counterculturalist movements to be. The Discordians' aim here was to discredit the beliefs of the Birchers and their ilk, by making clear how ridiculous and convoluted their paranoid belief system was. In other words, in presenting Discordianism as a faith, as noted by David Robertson, "Discordianism does not mock religion per se, but rather all rigid belief systems... and therefore does not challenge religion so much as relativize it." (Robertson., 2012, p. 428). Thus, in taking all rigid belief systems to task - religious, secular, and conspiratorial - Discordians wanted people to believe that, well, little can be firmly believed in.

Hill and Thornley were not alone in mowing this farrow. Discordianism was essentially post-modernist in ambition, sharing many practical and theoretical similarities with groups such as the Dada and Fluxus art movements, the more directly political Situationists International, and other early culture jammers. This was the case insomuch as they agitated for decentralised interventionist actions to both articulate and embody anti-establishment sentiment (see Jappe, 1999; Carducci, 2006). Shared fascinations with the disruptive power of media *detournements* were also present across these movements, which could be similarly recovered as a form of memetic practice (e.g. Sandlin, 2009). However, Discordianism did not reference academic, artistic, or theoretically oriented thinking in the ethical framework they provided. Nor did this acknowledge the political movements with which it shared comparable concerns. Indeed, aside from the oblique political allusions made by the Discordians regarding the far-right paranoiacs, the movement did not engage in political action ascribable to one wing or another. Rather, Discordianism referenced Taoism and new age beliefs, which somewhat aligned it with factions of the contemporaneous U.S countercultural movement, who similarly increasingly rejected Western rationalism in favour of Eastern and esoteric practices. In this respect, political disengagement couched Discordianism as a movement more associated with what Fred Turner has described as the new communalist faction of the counterculture: where radicality was expressed by dropping out, rather than attempting political engagements (Turner, 2005).

However, despite the pointed agnosticism on their political orientations, a politics can be ascribed to Discordian praxes, particularly in relation to their endeavours to proliferate the good word of Eris. For through engaging in self-publishing and wider acts of mediated guerrilla ontology, Discordians were closely affiliated with the 1960s US countercultural *milieu*, particularly the then-nascent alternative and underground press scenes. It is worth recounting that the emergence of alternative media in 1960s America was not itself without precedent. Indeed, the United States has long had a strong tradition in alternative media production, from the pamphleteering of Thomas Paine to the anti-fascist societies that emerged during World War Two (see David Armstrong's *A Trumpet to Arms* (1981) for an excellent account of this history). This was the lineage that led Hannah Arendt (1969) to conclude that the countercultural New Left's early emphasis on participatory democracy – effected through alternatively

decentralised, mediated advocacy – represented "the best in the revolutionary tradition" (p. 134). Further, as Arendt usefully captures, alternative media has a strong international dynamic as a revolutionary tradition, with the United States' approach sharing sensibilities with activities such as Samizdat, occurring in other continents. As Arendt notes, self-publication was a practice that "constituted the most significant common denominator of the rebellions in the East and the West" (Armstrong, 1981, p. 54).

We must be careful however, to not ascribe a means of distribution to the intents of any one political project – which is to say, that alternative media was not only the preserve of anti-fascists, leftists, or other revolutionaries focussed on emancipation. Indeed, within the political axis of the mid-20th century U.S., the aforementioned John Birch Society were an apt case in point here - with Birchers having made canny use of alterative media, establishing a highly active press by the 1960s, through which they could disseminate their paranoid beliefs. Similarly, right-wing Christian evangelists had much success in this area – most notably as Pat Robertson whose virtuosic adoption of alternative and public service communications technologies cultivated communities of adherents and laid the bedrock for the later emergence of the Christian Broadcast Network (Kintz, 1998). The *alt media* of the mid-20th century then is not best understood merely as an alternative means of distribution, nor a specifically Leftist, or progressive endeavour. Rather, in emerging as a practice afforded by technological and social change, alt media was open to operationalisation by myriad interest groups who sought to benefit from communicative heterogeneity and the proliferation of contents, forms, and stances that went against the grain.

The technological changes afoot in the mid-20th century, against which the emergence of alt media can be tracked, were expressed in an increasing availability of personal media devices and reprographic business technologies co-opted for personal use. Items such as portable home movie recorders and portable cameras allowed individuals direct means to produce photography and moving images, while reprographic technologies (e.g., mimeographs, Xerox machines, and other offset printing) were newly available to the non-professional. Individually or combined, photographic and reprographic technologies

afforded hitherto unachievable scalability for self-published media. Pre-1960s, the wide distribution of newspaper copy required linotyping before the document entered production – a laborious and expensive process. In contrast, offset printing, which became more readily available by the middle of the century, only required use of a typewriter and access to a mechanised reproductive technology. If you were able to obtain a personal camera, scissors, and glue, you had yourself a micro press complete with picture desk. With costs reduced and task fulfilment expedited, alternative media emerged from technical conditions conducive to its proliferation. Meanwhile, social movements whose discourses exceeded or ran counter to the limits of the acceptable mainstream found in alternative media a platform. Moreover, the proliferation of alt media operated outside a standard commercial model – which located engaging in the practice itself a radical act, insofar as it challenged the normative conventions of mid-20th century capitalism through championing models of distributed ownership, tendencies towards the non-proprietorial, and the eschewing the prioritisation of profit. The alternative media corpuses that proliferated were therefore coconstitutively realised and emerged from technical and social conditions that were, in interrelated ways, inherent to its materialisations and cultural significances.

Take one of the more famous small presses and distribution models; the Underground Press Syndicate. This was a national network of countercultural newspapers and magazines formed in mid-1966 which agreed to allow all other members to freely reprint their contents. This model of praxis was afforded by the availability of technologies utilised by communities who wished to enable a plurality of voices to enter media circulations, including, in reference to the example given, those that disseminated radical politics, advocated an anti-war stance, railed against consumerism, arguing for civil liberties, both individual and collective. Therefore, beyond distribution, alternative press divested power from capital. And this was true whether produced by those on the left and right wing of the political spectrum; underground presses, feminists, civil rights campaigners and students, evangelical Christian churches, community centres, cinema clubs, poets, artists, conspiracy theories, and indeed by the newly faithful Discordians. More than anything then, the techno-social conditions of the mid-20th century therefore afforded proliferation through making available conditions of communicative heterogeneity, which *thereafter* could be utilised for a range of diverse, and at times, ideologically oppositional intents.

Of course, as well as cultivating alternative media praxes, the use of personal media devices, or co-opted or subverted reprographic business technologies for proliferation, informed both the aesthetic aspects of the artefacts produced, and – as we saw with Faxlore – the sensibilities inculcated within specific corpuses. Accordingly, the reprographic devices across which the *Principia* proliferated shaped both the form and contents of the text. Evidenced by one of the odder quirks within this story, the first draft of the *Principia* – created in 1963 – was placed in the HSCA JFK collections in 1978 as document 010857. This came about due to Thornley becoming implicated in the Kennedy Assassination, and even investigated as a suspected conspirator by Jim Garrison – the man whose mimeograph machine was used (without his knowledge) to produce the volume (see Appendix One for further details). Thanks to this synchronous moment, a copy of this rare edition has been partly preserved, revealing it as foolscap sized, text-heavy, and image-and-insignia-light.

Now stored in the American National Archives are the second to fourth editions of the *Principia*, which – Xeroxed at local copyshops by Hill and Thornley, rather than mimeographed – were more numerous in number, circulating in the low thousands by the end of the 1960s (Wilson, 1995). This meant they were more frequently preserved within personal collections, as well as in the Discordian Archives (Gorightly, 2017b). The contents and form of these later editions were contoured by the reprographic technologies they were contingent upon, taking on a more fanzine-like appearance: smaller, folded, and with text interspersed with jokes, clip art, badges, and illustrations, in contrast to the more spartan first edition (Buxton, 2005). A further fifth "edition" of the *Principia* was issued, although this version was starkly different to its predecessors, comprising a telegram containing just the letter M.²⁰ Consequently, the image-heavy, reprographic fourth edition – which took the full title *Principia Discordia or How I Found Goddess And What I Did To Her When I Found Her: The Magnum Opiate Of Malachypse The Younger, Wherein is Explained Absolutely Everything Worth Knowing About Absolutely Anything – is accepted as the definitive*

²⁰ This was a printing error that Greg Hill interpreted as a sign from the universe he termed "the infinite aum" (Younger, 2013)

version (Greer, 2016, p. 110-111). This is the edition that has been most frequently reprinted subsequently, most notably by Loompanics in 1979 and Steve Jackson Games in 1994. Moreover, the history of the editions of the *Principia* and its iterations is also a history of how reprographic technologies had a co-constitutive effect on the proliferation of contents and formats (see Figures 15, 16. 17).

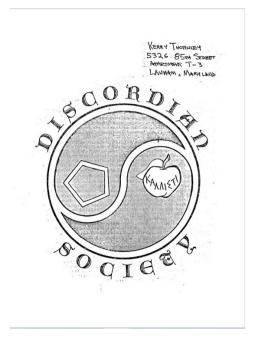


Figure 15. The front page of the first edition of the *Principia Discordia*, mimeographed onto Foolscap paper, sourced from the Discordian Archives

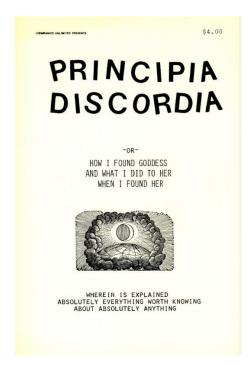


Figure 16. The front page of the 1978 Loompanics edition of the Principia Discordia, sourced from the

Discordian Archives.

THE FOR DENCIDIA DISCORDIA 00075	
THUS ENDS PRINCIPIA DISCORDIA This being the 4th Edition, March 1970, San Francisco; a revision of the 3rd Edition of 500 copies, whomped together in Tampa 1969; which revised the 2nd Edition of 100 copies from Los Angeles 1869; which was a revision of PRINCIPIA JOSCORDIA or BOW THE MEST WAS LOST published in New Orleans in 1965 in five copies, which were mostly lost.	DISCORDIAN SOCIETY DESIGNATE TO AN ANYWORD WANFESTATIONS OF PREATMANSCAL WANFESTATIONS OF PREATMANSCAL DID YOU KNOW THAT YOU HAVE A LOPSIDED PINEAL GLANDZ Well, probably you do have one, and ti's unfortunate because lopsided Pineal Glands have perverted the Pree Spirit of Man, and subverted
ALL RIGHTS REVERSED - Reprint what you like Linearway by hip on Press Published by POEE Head Temple - San Francisco "Or THE FUTURE SITE OF BEAUTIFUE SAN ANDREAS CATOR" OMICLO WHY HIGH WORKER COUNT HIGH FRENT OF COUNT HIGH FRENT	Life into a frustrating, unhappy and hopeless mess. Fortunately, you have before you a handbook that will show you how to discover your salvation chrough ERIS, THE GODOESS OF CONFUSION. It will advise you how to balance your Pineal Gland and reach spirit- ual Illumination. And it will teach you how to turn your miserable mess into a beautiful, joyful, and splendid one.
THE LAST HORD The foregoing downent was revealed to Mal-2 by the Goddses Esrealf through many consultations with Her within his Frinad Elland. It is guaranteed to be the kord of Goddses. However, it is only fair to state that Goddses doesn't clubys eavy the same thing to each listemer, and that other Rpiekoposes are sometimes told quite different things in their Revelations, which are also the Word of Goddses. Consequently, if you prefer a Discordian Sect other than POER, then none of these Truthe are binding, and it is a rotten shows that you have read all N word. MITLARIST OTELLAN LIBRARY	POEE is a bridge from PISCES to ADUARIUS

Figure 17. Page 75 of the 1978 Loompanics edition of the Principia Discordia, sourced from the Discordian

Archives

"If you think the PRINCIPIA is just a ha-ha, then go read it again." (Hill, 1965, n.p.)

Which is to say that through proliferation, technics imparted an ideological and material alterity to the Discordian meme. These aesthetic and affective attributes were reflective of the alternative media scene in which the traditional conventions of professional design were disregarded in favour of cut-and-paste layouts and reproducible graphics (Duncombe, 1997) - though, in time too, these formal and tonal qualities would also become codified, and ultimately put to market. Before that however, alternative media found expression across and through many media forms. The mid-20th century saw newly available home film and photographic equipment, as used by non-professionals to produce home movies; sometimes for personal use (as Abraham Zapruder had intended), or other times in service of artistic, political, or radical ambitions - as demonstrated by artists like Nam June Paik, Ant Farm and Joan Jonas, and radical film collectives such as the feminist Videa, and countercultural Videofreex. For some, television was their chosen medium: including the hectoring and hateful aforementioned Pat Robertson, who began proliferating his ultra conservative Evangelical message on YWAH-TV - a small UHF channel he purchased with raised funds, which went on to become the multi-national Christian Broadcasting Network. Such interventions, of whatever valence, were what Umberto Eco would refer to as "semiological guerrilla warfare" (1967; 1986), perpetrated by those whose aim was to raise consciousnesses through media co-option.

As these examples infer, the radical nature alternative media, such as the *Principia* and its ilk, was not only found in the ability to proliferate messages, aesthetics, and sensibilities (being reproduced and remixed across the vectors of content, form, and stance) but in how this mode of proliferation was realised through a rerouting of power. For Chris Atton (2002) the myriad forms of alternative media that emerged and proliferated in the mid-20th century defied formal, or tonal, or political categorisation. Instead, Atton draws on an anti-definition, provided by British research group Comedia and applied in the negative, suggesting that alternative media "is not the established order; is not the capitalist system; it is not the

mainstream view of a subject; or it is simply not the conventional way of doing something" (Atton, 2008). Mid-20th century alternative media then, of whatever form, of whatever intent – in all its heterogenity and communicative forms and functions - was positioned in opposition to the cultural authority asserted by the homogenising print and broadcast media, and cultural norms inculcated downstream.

As argued by Stephen Duncombe, alternative media did not merely aim to communicate a message, but sought to cultivate an encounter with a participatory model of cultural production "to be acted on" (1997, p. 129). Atton agrees, noting that "alternative and radical media must account not only for active audiences in the Fiskean sense of creating 'oppositional readings' of mainstream media products (Fiske, 1992) but also the realisation of the "reader-writer" subject position (Atton, 2008). Put otherwise, the emergence of a more available alternative media scene cultivated nothing short of a transformation in mediated social relations; instituting politics, shaping perceptions through the extension of epistemological frames, expressed and animated via an interventionist ontological engagement. When the artefacts materialised in such "alternative" arrangements are conceptualised as meme instances – i.e., artefacts proliferated to contribute to the shared engagement in a wider memetic cultural phenomenon (a political cause, a fandom, a religion) – then their political economic position can also be understood as oppositional and unaligned with the dominant (mid-century) capitalist model.

Further, a recursive cultural effect of this outlier amateurism was that alternative media producers could actively embrace non-professionalism, and engage in practices that the professional media could not: be outrightly partisan, draw on non-official sources, organise through decentralised means, and eschew the notion of running for profit. From student activist papers that emerged in the early Sixties, consciousness raising missives around civil rights, the development of second wave feminist writing later in the decade, the production of the *Whole Earth Catalogue* in the next – per David Armstrong – alternative media forms "served as the nervous system in the body politic of adversary culture" (Armstrong, 1981 p. 16). The radical, underground, zines, newsletters, comix, small presses, experimental time-based media art with the ideas, aesthetics, activism, poetry, and the politics represented therein – of which the *Principia* was a part)

not only existed in opposition to the mainstream in terms of its timbre and variegated content, but by virtue of its possession of an entirely different social and political economy. The fixed animus of proliferating communicative heterogeneity, of discord, then, was something that was located outside of – and positioned as oppositional to – the more homogenous mainstream.

All Rites Reversed

The weird, funny, and idiosyncratic, and self-published *Principia Discordia* – one artefact in an array of more or less proliferate esoteric oddities that were becoming particularly popular in certain countercultural quarters in 1960s U.S. – might well have been a footnote to history. Or else entirely forgotten. Proliferating in relatively small numbers, the *Principia* made a modest impact in the alternative press scene in the South and the West coast regions of the States. It was not reviewed by any arts or literary magazines, nor did it impact on the mainstream culture or academic circles at the time: This means the scale of trajectory and spread of content taken by the *Principia* tin the 1960s speaks to both the then-novel possibilities of proliferation opened up by the availability of reprographic technologies and the developing 'zine and alternative scene receptive to its form and contents, while also delineating the inherent limitations of appeal and extensive reach.

But circumstance intervened, and Discordianism – in name, aim, and essence – was to be shared on a global scale. Foundational to this was the novel copyright status applied to the *Principia* by Greg Hill: all of the editions issued by Hill and Thornley were attributed with a backwards "k" prefixed " All Rites Reversed", leaving the contents open to replication, remix, or other forms of reuse – a move in sympathy with the share-alike mindset developed in the wider alternative press scene. The first full edition of the *Principia*, issued in 1965, was ascribed with the first known example of a Kopyleft/copyleft attribution (Sutcliffe, 2017). Hill later stated that he did this to publish with a different "set of ethics"; the ideas he and Thornley worked on were to be freely shared, in pointed objection to the copyright laws that

restricted creativity for commercial ends (Hill, 1970). For Hill and Thornley, information was to be free – a principle demonstrated best by showing and not telling, and encouraging heterogeneity as a strike against the homogenic and homogenising hegemonic media structure of the mid-20th century. Kopyleft was not only consolidated as a theoretical or ethical principal in Hill and Thornley's text. It was to be demonstrated; in every borrowed item of clip art imagery, esoteric or religious reference, in-joke incorporated into each *Principia* edition. It gave a name to the cut and paste 'zine aesthetic and the ethical imperative of an anti-consumerist, heterogenous, mediatic countercultural scenes to which riff and remix were not only a pragmatic endeavour, but an act of political expression – that of being other. Further, it was a call to engage in proliferation, and to further propagate this meme and the political stance it represented: to actively engage in proliferation as a mode of praxis.

Over time, the novel "kopyleft" attribution became essential for Discordianism's percolation across other cultural spheres. It's spread began in earnest in 1975, when the *Principia Discordia* was near fully incorporated into "The *Illuminatus*! Trilogy", a highly popular series of conspiracy fiction novels written by Robert Anton Wilson and Bob Shea. The *Principia's* substantial incorporation into *Illumunatus*! was both made possible by the ethos of Hill's kopyleft – the free use of content, in any context, which extended to discourses that were themselves commercial in nature. For indeed, the *Illuminatus*! Trilogy, effectively a lengthy riff and remix of the *Principia Discordia*, was a commercial endeavour – and a highly successful one at that.

First published in 1975 as three separate instalments (*The Eye in the Pyramid, The Golden Apple*, and *Leviathan*) the series was subsequently issued as a single omnibus in 1984, the series saw Discordians prevailing as principal characters, enfolded in a multi-faceted narrative told from numerous, oftentimes conflicting perspectives. The *Illuminatus!* books describe a universe that occasionally crosses over with ours: one in the thrall of supra-conspiracies, sea monsters, the Kennedy Assassination, the Cthulhu mythos, John Dillinger, sex magic, occultism, numerology, and gorier elements such as human sacrifice. It was a direct engagement with the paranoic, conspiratorial mindset engulfing 1970s America. Recursively,

the novels' lead villains were the eponymous Bavarian Illuminati – the long defunct 12th century sect whose real-world prominence had been increased in the years prior to thanks to the John Birch society. In *Illuminatus!* they were reimagined as a contemporary secret society engaged in a perpetual struggle with a fictionalised version of the Discordians: fact and fiction plus history and hoax, combining as one. In being constructed so, these novels served as a media text which sought to destabilise consensus reality by developing dissensus as a literary-philosophical subject. Which is to say that by blending fact and fiction, *Illumunatus!*, like the *Principia* before it, sought to question and de-habituate perceived epistemes by asking readers to parse what they believe, rather than accept either conspiratorial or legitimised perspectives delivered to them via their attendant media regimes.

This is, of course, Discordianism writ large – in a literal sense: For *Illuminatus*! conveyed and amplified – and further proliferated - the ideas developed by Hill and Thornley. From mediation by mimeograph and mail, Discordianism was now proliferating on a global scale by virtue of the publication of *Illuminatus*! And *Illuminatus*! was, by any measure, a smash hit - garnering praise and laudatory reviews from critics, including *Publishers Weekly*, the American Library Association's *Booklist* magazine, *Philadelphia Daily News*, *Berkeley Barb*, *Rolling Stone* and *Limit* and *The Village Voice* (West, n.d.), before going on to win the Prometheus Hall of Fame Award in 1986 for libertarian science fiction. It's date of publication was timely: 1975, the same year that the Zapruder Film was broadcast by Rivera, and at an apex of US conspiracy culture (see Knight, 1999; Schulman, 2001; and Fenster, 1999, for further detail on conspiracy cultures in 1970s America). Subsequently, elements of the *Illuminatus*! narrative (and by stealth *Principia*) were parlayed and reproduced via the readership and cultural commentary the novels received. This inflection point also marked the moment where, for the first time, the Discordian meme became proliferated by a more mainstream techno-social arrangement.

Wilson by this point was emerging as something of an esoteric celebrity, having refined his Discordian practice (calling his engagement with – or rather, desire to break down – reality "guerrilla ontology") and embarking on a career as a writer and counterculturally affiliate figure espousing and furthering his largely

libertarian perspective. Within this context, *Illuminatus!* and in particular Wilson, were key links in the chain of proliferation that brought Discordianism to global attentions. Wilson was referred to by Robertson as a "contact man" for his role in proliferating Discordianism and bringing it to wider public awareness (Robertson, 2012, p. 412). And by rendering Discordianism into a narrative, *Illuminatus!* defanged the near-hostile timbre of the *Principia*, by virtue of being a (somewhat) more accessible read. As noted by Greer, while the *Principia* communicated the sensibility of Discordianism, it did not contain many practical tips on how to be a Discordian; *Illuminatus!* meanwhile, offered a frame of reference for incorporating Discordianism into one's everyday life (2016, p. 187).

A consequence of this literary amplification was to concretise erstwhile obscure Discordianism terminology and tropes into vernacular – which I propose proliferated memetically, and indeed, could be considered memes. Consider the *fnord*. Within the *Principia Discordia*, a *fnord* was a nonsense word, which peppered the eclectic text, with no explanation offered to the reader. Within the conceit of *Illumintus!*, its nonsense status is put into service of the narrative. And within its story, children are taught to not see the word "fnord", despite it being liberally used in newspapers and magazines. As these children mature into adults, they begin to encounter anxiety when keeping up with news media, since they unconsciously perceive the word 'fnord' without being able to parse it. If the indoctrinated hear the word *fnord* they are knocked into a stupor, rendered confused, and unable to resist their oppressors. This state of inarticulable and mediated discomfiture resonated with many conspiracy-addled *Illuminatus!* readers, who duly riffed on the term and made it slang. *Seeing the fnords* entered vernacular discourses in reference to the ability to "cut through the bullshit" and see the world for how it truly is.

Once minted and amplified as a real-world idiom in the vernacular of sci-fi and geek communities, in print, and online, subsequent to *Illuminatus!'s* release (Dyrendal, 2014), the term also became used in conspiratorial discourses, wherein *fnord seers* were implicitly the Nietzschean heroes, who unlike the brainwashed masses, could resist the epistemologies weaponised against them by new world orders. The word also serves as rabbit holes – readers and fans of the novels could plant them around for others to

find, and of course, if one were ever to stumble on a copy of the *Principia Discordia*, then you might well wonder if the story of the *fnords* is true. To consider the *fnords* as a meme in its own right – a fixed term subject to changed inferences over time – is to reveal how a meme can be ascribed with altered significances as technical and social contexts evolve. *Fnords* may be a nonsense word, but as a meme, it can be read to disclose the ongoing conditions of its emergence.

Fnords also remind us that memes sometimes spread in unexpected directions – as the is demonstrated in the persistence of Illuminati haunting popular imaginations. Though unarguably popular and influential, one putative aim of Wilson and Shea - to disabuse readers of conspiracy thinking - was an unqualified failure. Indeed, the current and ongoing prevalence of the Illuminati conspiracy theory -a version of the New World Order conspiracy canon²¹ – has largely been amplified thanks to its inclusion in the trilogy, and its unwanted success as a meme.²² – Take the first instalment in the trilogy, The Eye in the Pyramid. This title refers to the Eye of Providence; a mystical symbol derived from the ancient Egyptian Eye of Horus. In the novel, the Eye is the symbol of Bavarian Illuminati. This for one, is a complete fabrication: in fact, in real historical terms, the 14th century Illuminatus society did not utilise or make referce the Eye of Horus at all. The Eye did however have some association with contemporaneous secret societies such as Freemasonry and occultist groups such as Aleister Crowley's Thelemites, who were already anti-heroes of the satanic panic of the 1960s. Yet, at the core of The Eye in the Pyramid's semi-fictionalised premise is an alternative history where a number of America's 'founding fathers' were members of the Illuminati, who decided to add the eye symbol to US dollar banknotes. More antagonistically still, within this epistemic febrility, Wilson and Thornley would double-down, by planting further stories about the Illuminati in the underground press: slipping mysterious classified ads into the libertarian journal Innovator and the New Left newspaper rogerSPARK (Greer, 2016). Having entered a dialogic relationship with the John Birch Society in the previous decade as a means to discredit it, Discordianism's

²² The Illuminati conspiracy theory is a version of the New World Order conspiracy canon. Contemporary New World Order conspiracies, typically furthered by right-wing populists, including the John Birch Society, centre around claims that certain groups – including collegiate fraternities (Skull and Bones), gentlemen's clubs (Bohemian Club), and think tanks (Council on Foreign Relations, Trilateral Commission) – are front organisations of the Illuminati, which they accuse of plotting to create a New World Order through a one-world government. There is typically a strong anti-Semitic inflection to this conspiracy family.

mockery of conspiratorial thinking ended up amplifying the very thing it wanted to trounce – cultivating its proliferation, perhaps inevitably, to those who would not get the in-joke, and interpret the faux-conspiracism meme in earnest.

A Pathway Forks

Indeed, that some did not get the joke is evident: at the time of writing, a false link between the Eye of Horus, the Illuminati, and the dollar remains subject to many conspiracy theories to this day, having travelled from book, to conspiracy buff, newsletter, zine, radio show, TV broadcast, elements of the Discordian meme inevitably began to proliferate online as techno-social conditions evolved. And while the rumour and lore that proliferated on Usenet and early internet for a will be considered as a type of meme more fully in the subsequent chapter, the proliferation – that is, reproduction and remix – of Discordian lore travelled rapidly across online spaces, and remains today in contemporary online conspiracy fora such as AboveTopSecret.com, and InfoWars.com. (Indeed, as of 2021, the Illuminati have perhaps inevitably incorporated into the all-encompassing QANON conspiracy.) Significantly, across all these iterations, the Eye of Horus mythos is now largely discussed quite apart from the context of the narrative of The *Illuminatusl* Trilogy (see Fenster, 1999; Dyrendal, 2014; Barkun, 2013; and notably Gosa, 2011, who details how contemporary Illuminati conspiracy theories are laced with racist overtones).

The proliferation of Discordianism was by no means a direct line from print to platform-centric discourses, however. Indeed, it also made entrées into the worlds of theatre, music, and cinema, as well as becoming incorporated into the ethics of the Free Software Movement and early hacker and geek cultures – acquiring iterating technoeconomic statuses in doing so. This began in 1976 though the world of theatre when *Illuminatus!* was adapted into a theatrical production by Ken Campbell. Campbell, who had apparently picked up a copy of the novel when browsing a bookstore in San Francisco (Drummond, 2014), was inspired to adapt the *Illuminatus!* trilogy into a somewhat unlikely nine-hour stage play

performed at the Science Fiction Theatre of Liverpool, UK. Proving popular, the production transferred to London in 1977, enjoying a run at the newly opened Cottesloe stage at the National Theatre, before moving to The Roundhouse. These well-received performances served to introduce *Illuminatus!* to theatregoing audiences, while launching the acting careers of Jim Broadbent, David Rappaport, and others (Drummond, 2014). Further, though the stance of this theatrical production was suitably discordant, as with *Illuminatus!*, these productions saw the Discordian meme once more become incorporate into a more mainstream form of cultural production.

Further, a notable member of Campbell's crew was to go on to introduce Discordianism to the world of popular music. The set designer for the *Illuminatus!* stage play was one Bill Drummond who, with Jimmy Cauty, went on to form the Discordian inspired art and music collaboration the KLF in 1987. The KLF, also known as The JAMS, or The Justified Ancients of Mu Mu – nomenclature riffed on from *Illuminatus!* – have had wide if unconventional success over the course of their career, and have made repeated references to *Illuminatus!* and Discordianism, and associated mythos throughout (perhaps most conspicuously, through the recurrent mentions of the number 23). Moreover, the KLF have consistently ascribed to a much-discussed Discordian modus operandi, achieving success with a novelty song despite refusing mainstream assimilation, creating albums predicated on sampling and remix (McLeod, 2009), and bringing much attention to the practice of culture-jamming in doing so. They made media events: notoriously firing machine gun blanks into a horrified audience while performing at the Brit Awards in 1992, before going on to delete their entire back catalogue later that year, and burning \pounds 1m in cash made from their recording career on the Scottish island of Jura in 1994 (Higgs, 2013). Simply put, Drummond and Cauty's highly visible antics both tacitly and explicitly proliferated Discordian notions to the fans, press and critics alike – reverting perhaps, to showing, rather than telling, how Discordianism is done.

Elsewhere, the 1980s also saw Discordianism find expression in the (card) gaming world, when Steve Jackson (an associate of Hill, Thornley and Wilson, and publisher of the fourth edition of the *Principia Discordia* in 1994) of the titular Steve Jackson Games (SJG) created and released the highly successful,

multiple award-winning *Illuminati* card game. In this multi-player game, secret societies – including Discordians and the Bavarian Illuminati – compete for world domination – though the function I wish to point to here is how, via a leisure activity, Discordian treatments of conspiracy and guerrilla ontology were further proliferated. Fittingly, the game itself became subject to proliferate conspiracy theorising in the 2000s, largely due to a card seeming to predict the 9/11 terrorist attacks. This propagated the Illuminati meme in conspiracy discourses and discussions among those wishing to debunk such thinking. That this occurred in the energetic online discourses concerned with the events of 9/11, heavily characterised by conspiracy thinking and subsequent denials and debunks, ensured that Discordianism, whether lauded or loathed, was further amplified by being proliferated into and within the distinct context of digital techno-sociality.

To recap, Discordianism, amplified by *Illuminatus!*, was proliferated across and between various media forms – print, theatre, music, and gaming, as well as contemporary folklore and social commentary – as a meme. This was not only evidenced in soundbites, tropes, and slang habituated within vernacular discourse, but in the consistency of intent, that was proliferated variously, and to various effects. The fixed operandum of Discordianism was to challenge normative assumptions about epistemological realties by the active seeding of epistemic discord. That this called on adherents to engage in media, and proliferation and thereby acknowledge mediation as a constitutive force – that the technical and the social are irreducible. As a meme, it found quiddity – its thisness – and differentiation – it's whatness – in respect to the technics that co-constituted the iterating meme instances and the social contexts in which they had significance. And in respect to Discordianism, this included attaining a capital value ascribed by more mainstream modes of cultural production, which in turn altered the technoeconomic status of the Discordian meme over time.

Hacking the Main Frame

This complex and complicating trajectory was to continue emergent hacker communities in the late 1970s and early 1980s, became engaged in Discordianism. According to Kevin McLeod, evolving hacker communities embraced Discordian irreverence from the outset (2009, p. 117), admiring its sympathetic and formative approach to their ethos – being full of the pranks, mischief, hoaxes, and parodies that were also mainstays in hacker practices. *Mondo 2000* editor name/moniker St Jude defined a hack as the clever circumvention of imposed limit (Milburn, 2016), which was the *raison d'etre* of Discordianism, and the characterisation of Discordianism provided by *Illumunatus!* The faith and its sensibility, rendered crystal clear in narrative, particularly appealed hackers in the broadest sense – interested in challenging systems, social, technological, legal: things that constituted epistemological regime.

The continued admiration of the hacker community is well documented; evidenced by the direct references to Discordianism added to the Jargon File – a glossary and usage dictionary of slang used by computer programmers – soon after *Illuminatus!*'s publication. This lauding is significant because the Jargon File was significant: a resource to the puckish computer cultures burgeoning at the MIT AI Lab, the Stanford AI Lab (SAIL), and among ARPANET AI/LISP/PDP-10 users (Kilker, 2002). Initially existing as a networked file, the Jargon File too became distributed across and between other media, being issued in paperback in 1983 as the *Hacker's Dictionary*, and then again in 1991 as Eric Raymond's influential *New Hacker's Dictionary* (1991). Within all versions, the "ha ha only serious" sensibility inherent in Discordianism and *Illuminatus!* always loomed large. As stated on the Jargon File itself, Discordianism "aptly captures the [flavour] of much hacker discourse" (Woo, 2004; Hafner, 1995). As such, it is possible to see how the *Principia* and *Illuminatus!* both precipitated hacker ethos, and through memetic proliferation, reproduction, reversioning – and variegated mediation, of poesis and bringing forth – consolidating into praxis.

Engagement with media, and its mediating effects, was once again couched as key to achieving liberatory epistemic discord. Just like the "first-generation" Discordians' enacted media interventions – guerrilla ontology, culture jamming, pranks – to hack realities and challenge epistemological realities, the

appreciative audience the movement found within cyber communities too saw the mischievous ethos realised though infrastructural detournements. In general terms, the behaviours, sensibilities, and stance of Discordianism were becoming embedded within the subversive, playful, or otherwise oppositional practices of emerging computer communities. And unlike their forbears, whose media interventions were strictly analogue – 'zines, postcards in phone booths, letters to editors, and so on; outer, counter, or fringe media regimes acting in opposition to the centralised broadcast media operations and never to accrue predominance – the media the cyber generation of Discordians were working with was the stuff around which social realities were to become increasingly comprised. Thus, while the animating ethos and imperative were the same – with hacking in the purest sense not a practice associated with the specific activities performed, or the media being interceded, but rather the spirit in which they are done – the media, and moreover the techno-social conditions and the political economic conditions the praxis was animated by were changing.

There is an irony to be found in early hackers being fans of *Illuminatus!*. Its influence resulted in curious instances wherein the oppositional Discordian principals became codified and embedded into the media which were increasingly infra-structuring social realities – though as will be explored briefly below, and in some detail in Chapter Five, the mediation of discord was to become recuperated by capital and thus hegemonic powers. We can look to Palo Alto, CA in the late 1970s to gain insight into this dynamic. There, Greg Hill's "Kopyleft - All Rites Reversed" principle had begun to influence the practices of computer hobbyists, who cultivated a generalised share-alike mentality, particularly with regard to software production and iteration. Hobbyist communities, who could build their own machines from scratch, very frequently developed each other's software programmes believing that information should be free and that ideas are best developed through collaboration (Coleman, 2009). A prominent example of this occurred in 1976, when Homebrew Computer Club member Li Chen Wang developed the Palo Alto TinyBASIC programming language, to which he nominally applied a 'Copyleft: All Rights Reversed' credit. This was documented in issue no. 5 of computing magazine *Dr Dobbs' Journal* in 1976 (Rauskolb, 1976), which was an application of the attribution supplied to the *Principia Disordia* by Hill.

Yet, by the mid-1970s, software – isolated from hardware and licensed – was starting to demonstrate financial - and therefore proprietorial - worth. This was demonstrated by the newly inaugurated Micro-Soft company and its distributor MTIS, who had made their AltairBASIC plugin an explicitly commercial product. The proprietorial stance of MTIS was embodied in then-Harvard student and Micro-Soft cofounder Bill Gates, who was defensive over the right to make money from selling software, which involved ensuring products were copyright protected. Gates was to find U.S. legislature on his side, when the Copyright Act of 1976 deemed software a literary work entitled to copyright status. This judicial move caused schisms within the computer clubs and early cyber community. For the hobbyists, the attribution of copyright to software was anathema - for by proliferating it and sharing, they reasoned, the code could be forked, reproduced, remixed, and endlessly improved. Those such as Gates, who were treading the commercial path, had established their business model and, moreover, were prepared to advocate for use of copyright in software production. This was typified by Gates' infamous 1976 Open Letter to Hobbyists (a copy of which was mailed directly to the prominent Homebrew Computer Club) which excoriated hobbyists for stymieing a developer's ability to make money from their practice. (This despite Gates using Harvard computers to create AltairBASIC and thus benefiting from subsidy during the programme's development, which was later parleyed into profit via proprietorial manoeuvring).

Not that Gates's won the argument immediately. Rather, Gates' letter was met with resistance, and some fury, by a number of hobbyists. And neither Gates' rhetoric, his business model, nor the determinations of U.S. legislature department served to stamp out the share-alike mentality cultivated by those engaged in that practice. Instead, the encroaching proprietorial attitude typified by Gates and MTIS went on to galvanise an oppositional faction, with the Free Software Movement emerging in the 1980s in a bid to recapture the inherent spirit of the early days of computer hobbyism. Synchronously, the Free Software Movement was influenced by another Discordian-inspired intervention: in 1985, one of its champions – MIT's Richard Stallman – was sent a package by his friend, the programmer and artist, Don Hopkins. Hopkins had affixed this package with a "Copyleft" sticker that he had picked up from an East Coast sci-

fi convention (Hopkins, 2019). When Stallman received the package, he had been working on the GNU Manifesto and General Public License terms – an attribution model that offers people the right to freely distribute copies and modified versions of a work, with the stipulation that the same rights be preserved in derivative works created later. The first version of the GNU Manifesto was published shortly before Stallman received Hopkins' package in *Dr Dobbs' Journal* (Stallman, 1985). And as news of the Manifesto percolated, Stallman would subsequently apply the term "Copyleft" to his work with the GNU.

The Discordian meme proliferated here via a pin button sent in the mail, with Stallman's adoption proving pivotal for the visibility and understanding of copyleft as a concept. As Hopkins has recalled, "the phrase wasn't originally specifically associated with free software, but it was just one of many puns you could buy, printed on stickers or buttons" (n.p. 2019). Post-GNU, the notion of copyleft was indelibly tied to the Free Software Movement and its ethos, which retained its ties to the share-alike hobbyists of 1960s and the computer societies of the 1970s, with this amplified through its consolidation as an ethical approach, and as terminology. Indeed, beyond its practical application as the GNU General Public License, the notion of "copyleft" was rendered a statement of intent, retaining the alternative anti-proprietorial stance that Greg Hill had noted as integral to the phrase's conception. As noted by Danielle Kirby (Possamai, 2012), if the *Principia Discordia* seems to be one of the earliest expressions and "strongest champions" of the idea of copyleft (p. 47), then we might infer that through confluences, conventions, and correspondence, the notion went on to be productively integrated into – and challenged by – the cultural and ethical practices that produce code.

Enter Erisian Hyper-Space

As the 21st century approached, Discordianism found broader audiences still, thanks principally to a prominent Usenet group alt.discordia, the numerosity of which was afforded by its technicity: that of the burgeoning World Wide Web. Usenet had been steadily gaining a userbase during the 1990s, boosted by

the launch of America Online and the so-called Eternal September of 1993 - with alt.discordia's archives going back to 1994. Indeed, alt.discordia recorded over 23,000 topics1 representing a Discordian cabal of a size previously unimaginable. Usenet, followed by the web and then the internet, allowed for wide and discretised interpretations of this highly interpretable text, to both broaden and complicate – and live up to - its spirit and mythos. For Tilton, this iteration of techno-social realities was nothing short of "this transubstantiation of what was once a print media barrage into the divine HTML", with the sharing of the Principia online "a group effort... [an] attempt to expand the confines of the document to stretch throughout the Erisian hyperspace that is the Internet. Or maybe we're just bored." (Tilton, 1994). Usenet groups, such as alt.discordia, saw their userships increase in line with the domestic usage of the World Wide Web, powered in turn by the increasing affordability of personal home computers. By mid-2001, 50% of US households were online according to the Pew Research Centre (2015). This amassing usership was its own inflection point for the continuing proliferation of explicitly or implicitly Discordian principles. Once affected by analogue technologies of reproduction – be they fanzines or correspondence clubs, sci-fi novels, or stage plays, or by node-based, peer-to-peer networks - the ideas, ethics, tropes, and memes contained in the Principia could now reach globally distributed cabals. America was going online and, for better or worse, discord was going with it.

Homebrew Club member Lee Felsenstein would later reflect that the argument in Gates' letter "delineated a rift [between] the industry [trying] to make money and [those] hobbyists [trying] to make things happen." (Haddon, 1988). This could indeed be the schism in which epistemic discord – rasterised as communicative heterogeneity proliferated across the World Wide Web as it was at the turn of the millennium – began to become something distinct from a more interventionist guerrilla ontology, due to the simple fact that technical interventions into networked media – the writing of software, the setting up or dismantling of infrastructures – require skills that had not been habituated widely by the 1990s. Indeed, the production of the "user" in line with the commercialisation of the internet – individuals who were provided with the means to readily engage on the 'web for purposes of work or leisure without needing to know how the internet functioned on a technical level – created a class of subjects whose wonts to disrupt would be limited. The praxis and aesthetics of Discordianism were therefore arguably subtly cleaved just as the privatisation of the internet began in earnest, and web services, and their users, began to emerge. This process of privatisation was arguably inaugurated in 1996 in the wake of the Telecommunications Act signed off that year – in which, according to a *New York Times* splash, saw the Federal Government who had formally run this "vital national communications system" being "[turned] over to the private sector the job of operating and maintaining the network's major arteries" (Lewis, 1996).

Yet, though accelerated by the Telecommunications Act of 1996 – as discussed in more detail in Chapter Four - the emergence of the internet as we know it was also realised thanks to fortuitous timings. That the techno-utopian sensibility emanating around Silicon Valley in the 1970s came about during a period of not only vast technical development, but during a severe economic downturn (Levinson, 2016), piqued with institutional disillusionment. This saw tech-utopianism converge with the then emergent politics of neoliberalism: a tale now well told (e.g. Prasad, 2006; Cooper, 2017). Against the challenging economic and thwarted trajectories of the 1970s and 1980s, the pre-dot.com bubble of Silicon Valley was a beacon of success. Processing chips were getting smaller, ideas were getting bigger. Barriers reduced for web accesses, and subsequently there were more users, more websites, more content.

This techno-social reconfiguration ushered in new forms of industry, beyond the production and licensing of computer hardware and software. As well as the privatisation of the internet that began in earnest post 1996 (as explored in Chapter Four), this era saw the inauguration of screen-based design practices and user design thinking in line with the habituation of domestic computer and internet usage (Weiser, 1999). The web was being supplanted by the internet, and the internet was becoming more and more present, and co-constitutive, of social practices, and much more. And cyber-culturalist, techno-utopian champion *Wired* was there to boost it all. Indeed, the utopian, booster rhetoric of the techno futurists habitually over-indexed the emancipatory potential of this heterogenous, discordant new media regime. *Wired's* publisher Louis Rossetto, for instance, likened cyberspace to "a new economy, a new counterculture" – but also (somehow) "beyond politics" (Rosenzweig, 2004, p 354). Elsewhere, the

magazine's executive editor Kevin Kelly proclaimed "technology is absolutely, 100 percent, positive" (Keegan, 1995), while contributing editor John Perry Barlow argued "with the development of the Internet, and with the increasing pervasiveness of communication between networked computers, we are in the middle of the most transforming technical event since the capture of fire" ("What Are We Doing Online?" 1995).

This claim may have had elements of truth, unfortunately. The shift in political economic backdrop against which these increasingly privatised techno-social arrangement emerged, ironically, served to reroute power back to corporate monopolies: with digital media and service providers whose viability was contingent on use able to scale and resist competition (a moment considered in some more detail in Chapter Five). The birth of the user was also the birth of an economic rubric calibrated against user engagement. This was undergirded by user numbers and their extensive, proliferate use of digital media technics. In other words, the consistent social practice of memetic proliferation, when realised across an increasingly privatised technical array (despite the puckish ambitions once heralded by alt.discordia and other Usenet groups was to be rendered aesthetic only, with the ethical imperative stymied as a result of the co-constituting role of proprietorial media.

In this sense, the web-mediated history of Discordianism can be tracked against that well-studied arc which saw Silicon Valley emerged from the crucible of West Coast counter culturalism, government funded research centres in Menlo Park, Xerox PARC, academic research labs, suffused with new age mysticisms and individualism (see Turner, 2017; Brand, 1988).²³ So, while the form of mediation afforded by networked cultures could be distributed, and rendered proliferate, discordant, the media stack itself – what Tiziana Terranova would describe as the environment within which contemporary culture unfolds

²³ The primordial soup of Silicon Valley saw New Age types mix with scholars, technicians, engineers, hippies, cyberpunks, and transhumanists. The Californian arroyos had long been areas that saw the psychedelic social meet the academic and professional. This was a lineage that had shaped Silicon Valley since the 1940s: Jack Parsons (occultist rocket scientist, and his collaborator Frank Malina); Whole Earth Catalogue's Stewart Brand, who first took mescaline when in the army and then became a participant in one of the famous government-sponsored scientific studies of the effects of LSD at Menlo Park; and Douglas Engelbart, inventor of the computer mouse, who Brand worked for as an assistant at the time. This is as good an example as any to give a sense of how computers, cyber- and new age philosophies mixed, and reconceptualised the world as a network made of free information and the proliferation of it.

(Terranova, 2004) – was increasingly explicitly commercial; owned, blackboxed, and – with it – ubiquitous. Indeed, the purposes of this section, it should be noted that the ontological make-up of the mediated social realities that emerged in the 1980s benefited from an aestheticised politics of proliferation, but did so while structurally becoming increasingly centralised as a consequence of their constitutive technics being proprietorial.

Within this reconfiguring array, Wilson – and with him *Illuminatus*! and Discordianism – had acquired prominent cultural standing. Indeed, during the latter part of the 20th century, Wilson's personal mythos had been growing all the while. The *Principia Discordia* had already achieved cult status as a standalone text and, for its centrality to the *Illuminatus*! Trilogy, was referenced in sci-fi-oriented fanzines such as the *Golden APA* and *Nut Cult* (Greer, 2016, p. 187), as well as nascent organisations like the Electronic Frontier Foundation, the WELL, Usenet, newsgroups, listservs, and personal websites. As the most visible (and fame courting) person associated with the *Principia* and Discordianism's origins, Wilson was the "contact man" (Robertson, 2012) and key link in the chain of proliferation that saw Discordianism, named or unnamed, become deeply entangled with iterations of techno-society. Indeed, Wilson became something of a figurehead in the emergent hacking and computing communities and their increasingly prominent print and visual media discourses.

Wilson was a good fit. He looked the part – neatly trimmed goatee, a piercing glare, and often pictured holding glinting, rainbow-refracting prisms. Wilson was, by the end of the 20th century, a best-selling author, prolific writer, acid tripper, New Ager, and all-round eccentric, typifying the promises of technoutopianism, and the radical potential of memetic practices animated across the arrangement of technologies. Indeed, by this point, Wilson had become revered as something of a cyberculture philosopher (Sirius, 2012, referenced in Cusack, 2016), frequently gracing the pages of *High Frontiers* magazine (see Sirius, n.d), which later became *Reality Hackers* and subsequently *Mondo 2000*, and *bOING bOING*; his distinctive image concretising in cybercultural memory and shaping the evolving culture. His closest collaborators, meanwhile, largely retreated from the limelight, and one by one, started to die: Shea in 1994, Thornley in 1998, and Hill in 2000. In contrast, by the mid-1990s, Wilson had achieved a similar reputational stature to the (now disgraced) Hakim Bey and Timothy Leary (Greer, 2016). Consequently, as noted by Erik Davis (2014), Wilson-mandated Discordianism – along with his adjacent interests, which included "transhumanism, libertarianism, psychedelia, science fiction, rave culture, and the "New Edge" of early cyberculture" had a profound influence on early web cultures (Davis, 2014). It was amid this milieu that Wilson's status grew, as he championed cyberspace as a new frontier of civilization on behalf of his techno-utopian writerly, political, or business-driven acolytes. For Wilson and his cybercultural communities, media networks – then the web – were the means by which oppositional, anti-establishment vectors could strike out against the balustrades of economic and social hegemony.

I contend that the history and trajectory of Discordianism reveals such positions, typified by the stance of Wilson, to be a caprice. For, while the media historical tradition of Discordianism had already proliferated and emerged within early users of the web who were influenced in its ethos and memetically refactored the stance into code and web-mediated social practices, I suggest that this ambition was, around the turn of the millennium, supplanted by the techno-optimist brand of Discordianism of the sort mandated by Wilson. The Wilson-mandated Discordianism that consolidated in the 1990s can be considered a form of practice which retained the aesthetic position – the imperative to memetically proliferate discord through engaging with media technics – while only pantomiming the truly disruptive ethos of alterity, given the gesture of proliferation was realised through technical arrangements which, through use, accrued capital and power. Which is to say that the embeddedness of what we might call "late-Discordianism" within cybercultural techno-social milieus ultimately served to grandfather in the predominance of privatised tech companies who would go on to achieve monopoly status, accumulating market power in ways tallied to their ongoing (and increasing) use. The equation is quite simple: when discord is cultivated through proprietorial technologies used in social practices whose viability is contingent on use, then discordant memetic proliferation - inherently contingent on technologies as they animate social practices - can be recuperated. Once more, memes though consistently produced through proliferation emerge in ways contingent on their techno-social conditions. And in being so, reveal though their co-constitution dynamics specific to the conditions that afford them Though always proliferate, a meme might not always be as discordant as it seems – a dynamic addressing the proliferation of the iterating, and contingently realised, Discordian meme, as instances or corpus, as "cuts" or apertures into their conditions of emergence, reveals.

Conclusion

It is this sense that the "infopocalyse" (Ovadya, 2018) referenced at the start of this chapter, can be understood as the logical continuation of such a trajectory, and why the sense of "epistemic fragmentation" identified by boyd (2019) can be understood as a consequence of media arragements that are themselves the geneological products of historical context.

Regarding this techno-social reconfiguration, this chapter has sought to make a double-folded example of Discordianism. The first fold concerns Discordianism's memetic proliferation – typified in the means by which the faith's media text, the *Principia Discordia*, entered wider cultural milieus. I have accounted for the myriad modes of cultural production, including literature, theatre, music, film, as jokes, tropes, conspiracies, folklore, heterogenous all: Discordianism proliferated through. I have paid particular attention to how Discordianism's entrée into popular culture captured the imagination of early hacker groups and members of computing communities who had a hand in shaping the code, culture, and legislature that formed the early internet and web. This is a rich and significant legacy alone. Showing a genealogical history of this parody religion, Discordianism, and its memetic characteristics illuminates it as a historical social movement that prefigured, and in some respects directly influenced, the emergence of contemporary internet cultures: its mediating substrate *the internet* and the social practices animated across it. This speaks to this thesis' claim that memes, in the broadest sense, are only understandable as the product of proliferation, which itself is techno-social practice.

The second is revealed through a political economic reading of Discordianism's central cause: discord. This is achieved by paying attention to the (small-p) oppositional politics inherent to originary Discordian practice and their viability as media-contingent Discordianism riffed and remixed across subsequent techno-social conditions. My argument is that Discordianism's claim as a disruptive practice was too contingent on proliferating discord and distributed social practices animated through media use being utilised as a counter force to a homogenising media mainstream of broadcast and print. Yet, Discordianism was also to become subject to proliferation by mainstream media and latterly web technologies. Gaining particular significance within hacker and cybercultural communities, before being rendered more as an aesthetic than ethical position within Silicon Valley cyberculturalism, the Discordian meme was to become reified as a function of capital.

As this chapter also touches on however, there is an alternative history to be written on the topic – of homebrew computing, share-alike, and Indymedia, infoshops, and capital resistance. But not in our *timeline*. The process of reification was not teleological, but a contingent one. Just like the account provided here about the proliferation of Discordianism, from the mimeographed pages of *Principia Discordia* to find expression in music, culture to code was not linear, or an inevitability.

Further, this is not a hagiography of broadcast or historic techno-social paradigms, but instead a move to contextualise the emergence of a techno-social co-constituted by internetworked technologies and their political economic realities. Indeed, the discordant, communicative heterogeneity cultivated by memetic proliferation across networked media – the sharing and availability of information, the additional mean for self-expression, for organising, and so on – cannot and should not be discounted. At the same time, it is important to recognise the co-constitutive power of technics calibrated against the reconfiguration of forms of power. With the increasing predominance availability of web technologies came the rise of the user, of platforms, and digital services – and business models which, requiring engagement and use for their viability, first cultivated, and then insisted upon their own use. New media monopolies were to be

born, which thrived on the cultivation of discord, as was evidenced in the mid-2010s, referenced at the start of this chapter, and will be further explored as this thesis progresses.

That comes later. Before that, and in Chapter Three I will turn my attention to looking the emergence of phenomena that functioned as memes on early web platforms – an interactive game and urban legend. And while Chapter Three finally puts focus on emergences that are more squarely recognisable as internet memes, in what follows I will make clear that in the days of the early web – the 1990s, 2000s, and thus broadly pre-platformisation – the memes produced were co-constituted contingently, and therefore quite different in form or function to more recent internet memes. The web, a more minor and immature technology at the turn of the millennium, was – as alluded to in this chapter - a weird space. Accordingly, it produced memes in kind – riotous, funny, reflective of a different time, which can also be recovered as pre-configurations of the memes that became consolidated as cultural phenomena in the years that followed. Chapter Three then, will continue with the genealogical techno-social history of the internet meme, which are always mediated, and consequently always marked with distinction. Continuing with the chronological track, this chapter should have helped to indicates how the tributaries that formed our current moment in history are many.

CTRL P/CTRL V

In her essay "Folklore's Crisis" (1998), Barbara Kirshenblatt-Gimblett addressed a paradagmatic shift within the field of folklorics. Specifically, Kirshenblatt-Gimblett paid attention to the ways in which web technologies were being adopted in the proliferation of folklore, and the effects of this turn within scholarship. For Kirshenblatt-Gimblett, web mediated folk tales – referred to as *e-folklore* – emerged from a specifically realised practice; not a mere facsimile of oral or written folklore issued into *hyperspace*, but something else: neither "speech nor writing as we have known it, but something in between" (1998, p. 281). Many of Kirshenblatt-Gimblett's contemporary peers would have found this a bold move. At the time, *e-folklore* was not legitimated within scholarly folklorics, due it being web-mediated rather than orally conveyed. Kirshenblatt-Gimblett however, argued otherwise, recognising that *e-folklore* was not something lesser than *proper*, oral folklore, but instead was a folklore that emerged in reconfigured and distinct ways afforded by the techno-social conditions in which it was produced.²⁴

In this chapter, I will return to the same point in history when the case for *e-folklore* was being made – which was also the moment when memes began to emerge on the internet, in ways afforded by web-technologies – and consider, like Kirshenblatt-Gimblett, the distinct ways that these technics co-constituted these early internet meme forms. While Chapters One and Two have already argued that memes – characterised in respect to proliferation – have emerged in antecedent contexts to contingent effects, this chapter's driving concern is how the emergence of memes online realised them reconfigured ways, and to what effects. Once more, paying attention to the affording capacity of technics, and the co-constitution between technics and the social practices realised through their use, this chapter introduces a

²⁴ It is worth noting that the arguments furthered in this thesis provide the grounds to rearticulate folklore, e- or otherwise, as memetic in character – given its spread through processes of reproduction and remix. Indeed, some scholars have already moved to recover folklore as a form of meme (for instance, see Chess, 2014; Blank, 2018).

consideration of how web and later internet afforded the proliferation materialised memes distinctly. This will include considerations of how the constitutive medial capacities of web and internet technics – 2000s chat forums, web-based Usenet, blogs, and subsequently social and content platforms – impart affective and aesthetic qualities on the memes that materialise, become grammatised, and committed to what Steigler might call *tertiary memory* (2010).

Consider the Copypasta – a type of internet meme which sees a block of recognisable text, possibly supplied with another media asset (such as a GIF, video file, or image) reproduced and remixed across and between communities online. Essential to this meme is the inclusion of a block of text, which is either reproduced as-is, or modified in some way, while remaining recognisable as a meme instance related to an established meme. In regards to how these memes proliferate, copypasta are "textbook" – being reproduced or remixed across the vectors of content, form, and stance (see Figures 18 and 19 below). However, the codification of a copied and pasted block of text suggests that what has been grammatised in this meme is, in fact, a gesture.

C. What the fuck did you just fucking say about me, you little bitch? I'll have you know I graduated top of my class in the Navy Seals, and I've been involved in numerous secret raids on Al-Ouaeda, and I have over 300 confirmed kills. I am trained in gorilla warfare and I'm the top sniper in the entire US armed forces. You are nothing to me but just another target. I will wipe you the fuck out with precision the likes of which has never been seen before on this Earth, mark my fucking words. You think you can get away with saying that shit to me over the Internet? Think again, fucker. As we speak I am contacting my secret network of spies across the USA and your IP is being traced right now so you better prepare for the storm, maggot. The storm that wipes out the pathetic little thing you call your life. You're fucking dead, kid. I can be anywhere, anytime, and I can kill you in over seven hundred ways, and that's just with my bare hands. Not only am I extensively trained in unarmed combat, but I have access to the entire arsenal of the United States Marine Corps and I will use it to its full extent to wipe your miserable ass off the face of the continent, you little shit. If only you could have known what unholy retribution your little "clever" comment was about to bring down upon you, maybe you would have held your fucking tongue. But you couldn't, you didn't, and now you're paying the price, you goddamn idiot. I will shit fury all over you and you will drown in it. You're fucking dead, kiddo.

Figure 18. A piece of text known as the Navy Seal copypasta, which was created in 2012 by a person who, likely facetiously, wished to emphasise their military experience, that has been subject to much mockery and remix online

	e you have a mate in the pub malink source embed save save-RES report give award reply hide child comments
÷+	Oi m8, what the fuck did you just fuckin say to me m8? I'll have ye know I graduated top of my class in the Navy Seals, and I've been involved in secret raids on al quaeda, and I have over 300 confirmed kills. I am trained in gorilla warfare and I'm the top sniper in the entire US armed forces. You are nothing to me but just another fokken target. I will wipe yer nan's arse with precision the likes of which has never been seen before on this Earth, mark my fuckin words. You think you can get away with saying that shit to me over the Internet? Think again, fokken lol. As we speak I am contacting my secret network of spies across the USA and your IP is being traced right now so you better prepare fo' yer nan's coming, maggot. The storm that wipes out the pathetic little thing you call ur wife teacheth me better than yer nan's could even dream of. You're fokin' dead, kid. I can be anywhere, anytime, and I can kill ya in over seven hundred ways, and that's just with my bare hands. Not only am I extensively trained in unarmed combat, but I have access to the entire arsenal of the United States Marine Corps and I will use it to its full extent to wipe your miserable arse off the face of the continent, you little shit. If only you could have known what unholy retribution your little clever comment was about to bring down upon u, maybe u would have held ya tongue. But ya didn't, and now you're payin' the price, ya fucking lol. I will shit fury all over you and you will drown in it. You're fuckin dead, kiddo. permalink source embed save save-RES parent report give award reply hide child comments
	 [-] uwotm8GPT2Bot [+1][S] 81 points 24 days ago Fok kunt u got me riled up m8 permalink source embed save save-RES parent report give award reply

Figure 19. A modification of the Navy Seal copypasta created in 2020 by a GTP2, in a style known as "uwotm8", which is intended to invoke the intonations of a British person

Invented by Larry Tesler at Xerox Parc, Palo Alto in the mid-1970s, the ability to copy/paste through the use of keystrokes is an affordance of computer-human interaction. As a keyboard shortcut used in Graphic User Interfaces (GUPs), copy/paste was developed to provide a convenient and efficient way for users to undertake the high-fidelity reproduction of data in digital applications such as word processing and calculation – and would go on to become a standard function within most GUPs. However, copy/paste was not to remain an anaemic tool of administration. In tandem with the world wide web developing a social function, and as programmes with GUPs were used to in social practices, copy/paste in turn evolved into an expressive gesture incorporated into the forms of exchange developed by online communities. In the words of Jussi Parrika, copy/paste became a "cultural technique and aesthetic principle" (2008, p. 71), used to move data around efficiently yes, but used pointedly as a declarative – a gesture that made it clear that data is being moved around in a copy/pasted manner.

In respect to the copypasta meme then, the point is to share a recognisable block of text, with the inflection of the meme – be that to poke fun, to demonstrate community knowledge – evinced through the explicit, aestheticised use of a digitally mediated "efficient" *cultural technique*. Indeed, this was a technique so well understood that screenshots of copy/pasta texts themselves became included in this meme form. Of course, previous techno-social arrays have allowed for copy and pasting – as explored in relation to alt media, the endeavours of the Discordians, and the emergence of Copyleft in the previous chapter. Yet, just as *e-folk-lore* can be understood as a distinct iteration of folklorics – made so as a result of the techno-social conditions from which it emerged – the realisation of copy/paste through the use of web mediated technologies saw this gestured reconfigured and imbued with distinct aesthetic and affective characteristics, and cultural effects.

This observation is characteristic of the concerns of this chapter, in which I will consider how the meme became reconfigured when proliferated on the early web and onto the internet – and to what effects. This will entail making clear that while familiar in some ways, early internet memes were replete with distinct qualities as a consequence of their techno-social co-constitution. There will be two early internet memes drawn on as case studies in what follows – a game, and an urban legend; each of which had roots in offline context, but which spread and proliferated via digital internetworked technologies over time. Recounting their history will demonstrate how, through being proliferated over web and internet technics, these memes materialised imbued with aesthetic and affective attributes in ways co-constituted by, and reflective of, the techno-social milieux from which they emerged.

The first case study considers how the proliferation of memes in ways afforded by the early web functioned within the creation of individual and collective knowledge, or perhaps more accurately, belief. It recounts the strange story – or should I say gameplay – of Ong's Hat: a tale of conspiracy, science fiction, and occult happenings in the New Jersey Pine Barrens. Ong's Hat was an immersive transmedia experience initially inaugurated in the 1970s as a play-by-mail game, and gaining increasing popularity in

subsequent decades, as, perhaps inevitably, it started to be shared, discussed, and participated in online. Described by some as an Alternate Reality Game (ARG) – a characterisation disputed by the game's creator – Ong's Hat attracted the attentions a distributed online community, members of which might variously describe themselves as players, investigators, and sceptics. As such, Ong's Hat materialised as a proliferation of media artefacts produced as individual participants engaged with the "game" – be that to add to, question, debunk, or in any way contribute to the unfolding narrative. As such, in this chapter I will conceptualise Ong's Hat as a meme, by pointing to its proliferation through techno-social milieus.

Ong's Hat's proliferation over the course of three decades, starting out by post and ending up online, makes it a particularly interesting case study for this thesis. And as this chapter will recount, the aesthetic and affective qualities of both individual instance and meme corpus of Ong's Hat continually evolved in ways co-constituted by and reflective of its conditions of emergence. Additionally, as this chapter addresses, the unfolding, fantastic narrative of Ong's Hat, which proliferated in fragmented and discursive ways as a result of its ontological configuration brought forth notable epistemic effects; notably a sense of confusion within participants as to whether the immersive tale of Ong's Hat was a game at all, or whether the story was evidence of a coverup, or conspiracy. As this chapter will explore, this dynamic became particularly pronounced when the Ong's Hat meme proliferated on the internet. Which is to say that the specific manner by which Ong's Hat proliferated online - with player-participants contributing to the meme in ways earnest, credulous, sceptical, and in jest - deeply complicated how this distributed, shared story was understood. For some, was uncertainty, and high level of immersion was part of the fun. For others, tales of interdimensional travel in the New Jersey Pine Barrens exacerbated a paranoic mindset. Perhaps appropriately for a meme-cum-folk legend, Ong's Hat can be read as a warning of sorts – a foreshadowing of the runaway memetic narratives that would subsequently come to haunt many imaginations.

If the story of Ong's Hat considers a meme proliferating across analogue and digital technics and the epistemic consequences of a meme's ontological configuration unfolding in different techno-social

milieus, the second case study looks in more detail specifically at how early internet memes proliferated instance by instance. To do this, I will discuss Polybius, an early internet meme, centred on an unsettling tale about a nefarious videogame. Polybius spread online from the 1990s onwards, as hearsay, embellishments, debunks, and earnest retellings about a dangerous arcade game which wrought havoc on its players. As a corpus, the Polybius proliferated from forum to forum, site to site, media outlet to media outlet, with each new additions contributing to both the tone, shape, and significance of the meme. Each meme instance - that is, each individual contribution to the collective idea of Polybius - was an individuated response to a wider and unfolding text; a point in its ongoing distribution, and a tertiary retention committed to cultural memory. As this chapter will explore, Polybius' conditions of emergence had a telling impact on Polybius' location within cultural memories, with its manner of proliferation integral to the epistemic frame it began to occupy. Like Ong's Hat, Polybius ultimately became a shared story so diffuse as to become unnavigable as a coherent text. Yet in doing so, something important was disclosed – that continually iterating conditions of its emergence had, by the 20th century, resulted the realisation of new, and unpredictable, forms of meaning-making. Couched so, in Polybius this chapter will document the emergence of a meme corpus pointedly contoured through the technics that proliferated it. And in so being, the Polybius meme – as an analytic device – concomitantly provides insights into the techno-social conditions of emergence from which it was brought forth.

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In some ways, the examples covered in this chapter are a minor literature, dealing as they do with gameplay and rumour, and having no (known) serious consequences for participants or onlookers. But they are, I suggest, benign indicators of how a change in techno-social conditions result in reconfigured memetic emergences, which in turn, as tertiary retentions, become constitutive of cultural memory – with the proliferate meme, as a cut, a clarifying aperture through which the interplay between technics and the social are evinced.

Starting from the End

It was 2001 when Joseph Matheny abruptly brought the game to an end via a blunt blog post. He had called it the Incunabula Papers – though it was more commonly known as Ong's Hat. A participatory conspiracy-themed multi-player game, Ong's Hat was realised across a number of media forms – 'zines, newsletters, and more latterly, web platforms. Putatively, the objective for game players was to resolve a mystery concerning an elusive cult that supposedly resided in the New Jersey Pine Barrens in the 1960s. The objective of Matheny's game design though, was a little different – concerned more with ensuring Ong's Hat sustained and unpredictable emergence.

As Ong's Hat principal architect, over the course of the game's run, Matheny would seed clues, plant rabbit holes, and set the general direction of the plot. Ong's Hat initial iteration was as a "play-by-mail" game. The structure of Ong's Hat was idiosyncratic. Rather than issuing Ong's Hat as a cohesive narrative, Matheny invited player participation through the placement of adverts in the back pages to select 'zines and alt weeklies - a process he began in the 1980s. (Kinsella, 2011). Matheny structured Ong's Hat this way in the anticipation that readers would take an interest in these odd snippets of narrative, and start to piece the story together. Seeding abstruse references to a secret commune nestled in the New Jersey Pine Barrens, eccentric physicists manufacturing unthinkable technologies, cult activity, and hints of a conspiracy, it is perhaps of no surprise that Ong's Hat piqued the interest of some, perhaps more paranoic, alternative media readers. More, in addition to being the medium via which Ong's Hat was run, these adverts encouraged reader - or participant interaction. Included in the advert text was a PO box address, which Matheny encouraged people to write in to, should they want to find out more (Oelbaum, 2019). Functionally then, the adverts developed the storyline to Ong's Hat in increments, while in more contemporary parlance, they functioned as rabbit holes: entry points that would entice engagement with as-yet-unseen wider mysteries being hinted at.

Those participating in this play-by-mail exchange would, over time learn about a pair of academic outcasts called the Dobbs twins²⁵ who had been kicked off their PhD programme at Princeton. Ostracised, the Dobbs had founded an Ashram cult compound in upstate New Jersey, in the abandoned outpost of Ong's Hat ²⁶ setting up the Institute for Chaos Studies (ICS) once there. Via the ICS, the Dobbs advanced their stigmatised research topic – interdimensional travel facilitated by quantum mechanics. Having already proven too controversial for both the academy and mainstream society at large, the Dobbs worked off grid, and over time attracted a community of outcasts, hippies, mystics, and communalists. Eventually, the Dobbs and the Ashram community created a device called The Egg – a dome shaped machine big enough for a human to sit in and, if willing, be transported to an alternative universe, called Earth 2. And one by one, the communalists did just that, leaving nothing behind in Ong's Hat, other than a desolate hut.

The storyline of Ong's Hat then, was a science-fiction infused mystery, piqued with conspiracism, and fantasy, which would go on to pique the interest of a global community of participants. No doubt part of that interest was piqued as a consequence of Matheny purposefully unfolding Ong's Hat in a way that inferred that the odd tale of interdimensional travel and high weirdness in the New Jersey Pine Barrens might not be a story after all. That is, as he opened up Ong's Hat for participation, Matheny made no overt reference to the confected nature of its storyline.

Game participation then, was the quest to understand what the nature of this cult was; who was involved, and whether there was some kind of coverup – with earnest and credulous contributions alike solicited. More, Ong's Hat was participatory in nature not only because there were scores, and then hundreds of players involved, but also because the engagement from players formed a feedback loop with its architect.

²⁶ It is also of note that J. R. "Bob" Dobbs is the figurehead of the parody religion the Church of the SubGenius, which had taken inspiration from the Discordian movement explored in Chapter 2.

As game designer, Matheny would respond to and account for player contributions in the gameplay, including their speculations, theories, and suggestions about narrative in the story as he furthered the plot. Doing so provided a rich experience for many players, some of whom became deeply invested. Indeed, so involved were the participating community, that when Matheny declared the game concluded, many were left shocked and disbelieving.

Accounting for its engineered interactivity, Ong's Hat is now often referred to as an (and perhaps the first) Alternate Reality Game (ARG) (Kinsella, 2011). However, Matheny himself preferred the term "living book" (Matheny, nd). Matheny's characterisation of his work is resonant of Umberto Eco's notion of "works in movement", which "characteristically consist of unplanned or physically incomplete structural units" (Eco, 1962, p. 12). That is, Matheny created an open-ended narrative that would emerge and iterate in a rhizomatic and recursive way – with this open-ended structuration initially realised through the co-option of print media and postal services. Similarly, it is as an *unplanned* and *incomplete* corpus that I consider Ong's Hat a meme in the extended sense proposed in this thesis, that proliferated analogically and online, emerging with iterating aesthetic and affective attributes as it did so – and moreover, resulting in the shared experience of Ong's Hat, as a singular collective meme, reconfigure all the while.

For the players then, there was no sense of completion to be had, no sense of "winning" promised, and no end to the narrative arc in sight. Instead, the participation cultivated between creator and player of Ong's Hat was purposefully contingent and open-ended, with the direction and theme of the narrative set by Matheny, but supplanted and augmented by the responses garnered from players. To use Matheny's words once more, Ong's Hat was designed to cultivate a form of "infinite play" (2013), where player-participants responded to and riffed off the kernels of narrative the story's architect had shared with them.

The epistemic status of Matheny's *living book* was complicated further given that its narrative included elements drawn from the real world. For instance, Ong's Hat is a real place in the New Jersey Pine Barrens – kind of. It certainly exists on real-world maps – though its history is contested, and it largely believed to be an abandoned outpost, ironically made famous as the result of Matheny's machinations. Additionally, Ong's Hat had already been included within a piece of conspiracy fiction produced disgraced writer Peter Lamborn Wilson (aka Hakim Bey) which had circulated around the San Francisco 'zine scene in the early 1980s (Kinsella, 2011). As an acquaintance of Wilson, Matheny's development of his living book was in part a riff off Wilson's work: not simply embellishing the tale, but retelling Wilson's story within the universe of Ong's Hat as if Wilson's piece of fiction was actually fact.

More confusingly still, Matheny developed the notion of the Incunabula Papers (from which Ong's Hat official title is derived); a putative range of literary and research materials that, within the conceit of the game, pertained to the mysteries taking place at Ong's Hat. In Matheny's telling, the Papers were a catalogue of academic publications, rare books, and 'zine articles that, when read together in the correct way, would enable the reader to understand what had happened at Ong's Hat. No such catalogue existed – the Papers were entirely of Matheny's own confection, and were a story within a story. The status of the Papers was too made more complicated, since the catalogue's listings contained both real books – such as non-fiction by physicist (and Matheny's friend) Nick Herbert, and writing by Philip K. Dick – and entirely made-up titles. More confounding still, Matheny invented a curate for the catalogue: the fictive Emory Cranston. Feigning the role of researcher, Matheny's amateur sleuth, with the help of other game participants, was dead set on finding out more about Emory Cranston, and cracking the mystery of Ong's Hat. This means that for the purposes of the game's narrative, Matheny situated himself as a participant in the game when he was really its architect.

Play-by-Media

Having established Ong's Hat as a play-by-mail interactive game, Matheny developed and engaged with an additional distribution model as the 1980s continued. This time, he went further than publishing the story as snippets in adverts, and instead saw Matheny issue a 'zine-like pamphlet called *Ong's Hat: Gateway to the Dimensions, a Full-Color Brochure for the Institute of Chaos Studies and Moorish Science Ashram.* It opened with the lines:

"You would not be reading this brochure if you had not already penetrated half-way to the ICS. You have been searching for us without knowing it, following oblique references in crudely Xeroxed marginal 'samizdat' publications, crackpot mystical pamphlets... In any case we know something about you, your interests..."

Once more, this iteration of the story was written as if in earnest. More, it was written to directly address the readers – perhaps to play up to confirmation bias within the alt-media readership, as a type of cold reading – as if to divulge specifically to *them* information about a secret cult with the capacity to travel between dimensions. The pamphlet signed off by once more encouraging those who had been intrigued by the text to correspond with Matheny in order to *find out more*. Which is, it called readers to participate.

This time, the PO Box provided routed via a remailing system in Hong Kong – a choice made by Matheny in order to up the intrigue (Luis, 2019). Matheny was not alone in distributing *Gateway to the Dimensions* either. For, once in circulation, *Gateway* became included in the alt-weekly scene – which saw all or part of the pamphlet copied, and circulated via the underground press, popping up within regionally published 'zines (Lange, nd) or proliferated as Xeroxed copies circulated to members of the alt-weekly mailing community. As such, *Gateway to the Dimensions* was subject to technologically and socially afforded amplification – similar to *Principia Discordia* and typical of the copyleft/'zine scene – which the materialised artefacts produced realised in relation to the political economic model and ethos implicit with the use of alt media; outsider or non-mainstream knowledge, high weirdness, economies of distribution that were adjacent to the predominant broadcast model. Moreover, each new instance, and individual contributions contributed to the shared story, which both furthered it, and had a constitutive effect on the developing shape of the Ong's Hat *meme*.

Like the adverts, the story of Ong's Hat told through the pamphlet and its derivatives were delivered as if in earnest. For some who encountered them, these strange missives would seem real, and would read as evidence of a genuine alternate reality. This effacing quality was intentional of course. It was, once again, Matheny's decision to never explicitly refer to Ong's Hat as a game. Consequently, some who encountered the fragmented rumours may have thought they were stumbling on a genuine mystery. Alternatively, those of a more incredulous bent, could choose to play along, and engage with Ong's Hat by feigning the role of a believer, or otherwise adopting a character in the game. Of course, within an open-ended narrative structure that not clearly signposted as fiction, participants – true believers or otherwise – were not just players of this game. Rather, they were contributors – for their responses to the game became part of its compositions, facilitating its spread and enriching the storyline. Indeed, it was through a participatory model that Matheny could realise his ambitions of "infinite play", with individual player contributions – the reproduction of the pamphlet, the mailing of letters – shaping the proliferation of the wider game. Which as a meme, saw it spread in ways contingent on the technics in use.

In Pursuit of the Egg Room

That Ong's Hat initial mode of proliferation was via reprography via alternative weeklies resulted in reprography in the context of the 'zine scene becoming constitutive of its materialisation. And, despite inviting participants from players unknown, distribution of Ong's Hat via mail, alt media production, and reprography also afforded Matheny some degree of authorial control, with his interjections as principal "researcher" contouring the shape of the story as it emerged through an analogue media array. To be sure, the "analogue" materialisation of Ong's Hat was itself a complex work, with its structure, narrative trajectory, and even category effacing and ambiguous. Yet all this strategic incoherence was to become even *more* confounding when Ong's Hat went online.

That Ong's Hat emerged online is no surprise. Many of the print-based communities it appealed to were themselves reconfiguring into web mediated social groups, with factions of the alt media scene also becoming early adopters of the web, who would thus bring their interests to bear online. Indicative of this is the inflection point which propelled Ong's Hat into *hyperspace*: after Matheny contributed an article to issue 11 of *bOING bOING* magazine in 1993 (Webb, 1993). At the time, *bOING bOING* was still a paper-based alt publication covering cybercultural issues. Matheny's piece – written in character as dedicated Ong's Hat researcher – was delivered as an interview between his fictionalised version of himself, and a fictionalised version of the (real) physicist (and friend), and supposed Incunabula contributor, Nick Herbert. Delivered relatively straight – Matheny as researcher, grabbing a precious few minutes with the seemingly elusive and eccentric Herbert – the article included a discussion of Herbert's (real world) work; which really did include an esoteric subdiscipline named "quantum tantra". Pleasantries over, Matheny pressed his interviewee to share details about the work of (the fictive) Emory Cranston and the rumours of strange goings on in the New Jersey Pine Barrens. This line of questioning prompted Herbert to "walk off", bringing the exchange to a close. It's a good read.

Perhaps as testament to that, the *bOING bOING* piece is the first archived instance Ong's Hat being referenced on the web; in a post contributed to alt.magick web-accessed Usenet forum on February 11, 1994 (Anon, 1994, accessed May 27, 2019). Further posts appeared up until 2000 across a number of different Usenet groups including sci.math, alt.illuminati, alt.conspiracy, and alt.society.paradigms, which in turn sparked the proliferation of multiple discussions on conspiracy websites, such as darkplanet.net – a site which (rather cutely) had its own forum space dedicated to Ong's Hat discussions called the "Eggroom" (Kinsella 2011). Which is to say, that Ong's Hat appealed within spaces for discussion of the paranormal, esoteric, and conspiratorial.

The spread of the story of Ong's Hat – from play-by-mail-esque game to its inclusion in alt media, to being amplified in *bOING bOING*, and then establishing itself within early web discourses of was the realisation of Matheny's transmedial ambition. This shift also upended the dynamic between

Matheny as game architect, and participants. The desire from participants to interpret and decipher clues scattered by Matheny remained strong, but in having the capacity to share their theories with other participants in a peer-to-peer fashion diminished Matheny's authorial control. That is, in persisting as tertiary retentions, available for asynchronous engagement, the contributions – meme instances – by participants, issued in earnest or in play, could function as community-produced rabbit holes for others to fall into.

Within this context, the proliferation of Ong's Hat could continue unabated, whether or not Matheny was involved. At the same time, participation was made easier; since there was less friction in firing off a reply to a forum post about an Ashram commune, or pine barren, compared to responding play-by-mail (an easing of "task fulfilment" (Liben-Nowell, 2008)). No longer was the reach of the game was metered at the speed of reprography and mail distribution. No longer were contributions restricted to the medium of print, which may or may not be incorporated into the narrative. That is, no longer was Matheny the arbiter of the storyline's overall direction. No longer, indeed, was there a coherent storyline to speak of.

In this way, this proliferation of Ong's Hat online was a comprehensive reconfiguration of the architecture of the game – which is to say that architecture the technical-social array across which Ong's Hat proliferated was reflected, and recursively looped into, in the game's unfolding narrative. Online, each interaction acted as a node within a distributed narrative, with the affordances of the media used for proliferation shaping the aesthetic and affective attributes of the tale. Largely comprised online of text-based threads, digital facsimiles of *Gateway to the Dimensions*, transcripts and parsings of the interview between Matheny and Herbert, photographs of the actual New Jersey outpost of Ong's Hat taken by those who had troubled themselves to journey there. Also contributed were hyperlinks to resources that participants considered adjacent or illuminating – such as information collated about Project Montauk, and the Philadelphia Experiment, Ayahuasca and psychedelics, and Chaos Magick (such as on the deoxy.org forum, launched in 1993). Ong's Hat's

co-constitution then, by the media-rich, hyperlinked immediacy of web technologies was therefore both amplifying the games spread, as providing means for additional dimensions, trajectories, and associations to be incorporated into the story being collectively experienced by individuals, with individuated responses contributing to the experience of the collective. To adopt a term from Norman Fairclough (1992), these distributed contributions were variously "intertextual" (i.e., made in awareness of their inclusion in a game) and "interdiscursive" (i.e., made in a credulous fashion). Becoming less legible as a game, Ong's Hat was instead interpreted by some to be grounded in reality (Kinsella, 2011). That is, the animus of Ong's Hat was altered as, instance by instance, this meme proliferated around the web.

As a transmedia experience, Ong's Hat reveals how media technics and their use for processes of proliferation co-constitute memes, with the affective and aesthetic attributes of meme forms and thereafter their commitment to tertiary memory brought forth and realised in contingent ways. The reconfiguration Ong's Hat underwent as it emerged as internet meme, is indicative of the *telematic context* (Bataille, 1985) inherent to web mediation; always generative of information, be it readable by humans, or machine, and replete with the capacity for storage, retrieval, reproduction, and remix. Individual contributions to the Ong's Hat meme served to animate exchanges, before becoming preserved and retrievable as records – lingering in threads, in abandoned blogs, in paranoic fora - for those who would experience the game asynchronously. In the case of Ong's Hat, the human readable information – materialised as a meme comprised of meme instances (text posts, images, hyperlinks, and GIFs) accumulated and persisted for the ongoing individuated encounter by those who comprise the collective community of participants – whether they knew it or not. This was a telematic work of memetic abundance that was to defy comprehensive legibility.

Before bringing the game to a close, Matheny would lean into the type of epistemic confusion Ong's Hat could impart. By the turn of the millennium, Matheny had created several astroturf-style clues and websites related to the story, designed to work as rabbit holes for new participants in the experience (Paskin, 2018). Creating dedicated website incunabula.org, in which Matheny decided to create an archive of Incunabula-related Bulletin Boards threads, as well as an index of blogs and publications that made reference to *Ong's Hat*. Additionally, Matheny "began creating several websites related to the topic, interconnecting all of them through hyperlinks in texts, images, graphics, etc. so new potential readers would have more than one access to the *Ong's Hat* universe" (Kinsella, 2011, p. 39) – forming a constellation of nodes and nexuses around which communities concerned with *Ong's Hat* assembled and grew in numbers.

As the online rumours about Ong's Hat started to flourish, Matheny continued to issue confusingly earnest-seeming contributions to the phenomenon; typified perhaps by his 2000 appearance, in character as an Ong's Hat researcher, on Coast-to-Coast FM. During this interview, he described himself as a researcher who was "coming to the end of verifying" whether there was a cult perusing "science research" in Ong's Hat, New Jersey – with his conclusion being that definitively yes, such a cult existed. Asked if it was a scam by radio host Art Bel, Matheny demurred, saying he'd wondered that himself, but that he'd become convinced by all the evidence he'd uncovered while researching the topic. Matheny also declared that there was hard evidence (paperwork, specifically) that lent credence to the success of the Dobbs and their Ashram commune building devices that allowed them to migrate to a parallel universe.

Matheny's performance, despite the wild claims being made, was extremely convincing – and the forums ate it up. Ong's Hat began to appear on websites run by independent researchers who were interested in the paranormal, suspect government activities and conspiracies, and techno-esoterica. For example, stealthskater.com – a personal website that lists "advanced Physics & Cosmology UFOs (both "ET" and man-made), the Philadelphia Experiment & Montauk Project, military hardware & technology psychic remote-viewing and Time-Travel" as its areas of concern, includes the Incunabula Papers in an index that also includes theories of military bases and technologies, psychic abilities, and a reader on synchronicity (as of January 2021). Elsewhere, a personal website with a conspiratorial edge, marsearthconnection.com, speculates whether the "mysterious Incunabula Papers" are the first sign of a "stage three" synchronicity

(as of January 2021). Noting the story's original appearance on alt.magick, this writer speculates that the legend is no mere transmedia story, but a deep – real – mystery involving "a benevolent race of humanoids descended from Javanese lemurs on a parallel Earth, capable of dimensional shift without machinery" and that Joseph Matheny had promised that "he and former commune members are set to disclose more in the year 2000..." An Angelfire blog dedicated to Incunabula (angelfire.com/biz/incunabula, as of January 2021) contained a "resources" section that linked to materials published by Matheny, her own paranormal research, and to the Eggroom forum on darkplanet.

As Ong's Hat proliferated, instance by persistent instance, it morphed from game into what independent scholar Jorges Flores called "a continuously growing, self-feeding textual complex" (Flores, 2022, p. 107). This extreme ambiguity near-ensured that some participants entered a state of boundaryless play – the alternate reality of Ong's Hat glimpsed at online, endorsed by radio, and perhaps most importantly, affirmed by others in the Ong's Hat community. Incunabula Research Centers [sic] and sleuth networks emerged, in which the sceptics and conspiracists, incredulous and credulous debated their opinions, entrenching Ong's Hat ever deeper in cultural memory. became, for some participants, one and the same as their everyday life.

Half a World Away

It was the level of immersion cultivated by Matheny's *living book* that led some observers to consider Ong's Hat an – and perhaps the first – Alternative Reality Game (ARG) (Śliwińska, 2015). Best understood as a form of designed, interactive play, ARGs are understood today as a distinct gaming experience, in which players participate as if they are experiencing, well, an alternative reality. Developed in tandem with the internet/transmedia storytelling (Abba, 2009), ARG's often involve participants exploring and engaging in activities set within these confected universes, with the affective success of the games contingent on players participating as if truly experiencing the "universe" being created. This

commitment is known as TINAG: *This Is Not A Game*.²⁷ This can take many forms, though it typically involves participants becoming characters within the gameplay/universe or, at a minimum, playing as if the premise of the world being explored is real. Within the ARG universe, gameplay typically involves being tasked with puzzle-solving, both individually or in teams, with clues seeded on websites/media or benefiting from crowdsourcing. The success of the overall experience in enhanced by mass adherence to TINAG: the mutual agreement to suspend disbelief, and act as if the universe being explored (and built) is real. Doing so cultivates senses of urgency, realism, and immersion.

ARGs therefore demand and benefit from a high level of immersion and investment, with a commitment to the role and an overarching premise important for the development of gameplay. Yet it is possible and common for the boundary of game play to be made clear. Take the early ARG, The Beast: a game run by Warner Brothers as promotional material for Steven Spielberg's 2001 film A.I. This saw players solve puzzles on a time-traveling murder mystery. It was a slick affair that was run by game designers and developed explicitly as a piece of marketing material. While internet-centric, publishing more the 4000 clues a series of fictional websites, The Beast was transmedial, with the designers – or *puppetmasters* as they were known – planting trailheads in billboard posters, national television commercials, publicly accessible telephone messages, and promotional events. There was even some strategically placed graffiti in certain US cities (Hall, 2013). The Beast was positively received, with many accolades: in the words of The New York Times, the game seemed "completely real". This was an affect designer Elan Lee confronted through design, with his team striving to walk the line between "immersive" and "overwhelming.". "Even though we you don't want to admit that it's a game", Lee reflected, "you still need to have an 'off switch" (McGonigal, 2003, pp 12). So, while, as noted by McGonigal, "gamers maximize [sic] their play experience by performing belief, rather than actually believing, in the permeability of the game-reality boundary", with the provision of an "off switch" thus functioning as a crucial boundary marker. In addition, the Beast's status as marketing exercise served to bolster a boundary line - this was a PR stunt mobilised to promote a film - as did the clear and explicit delineation between game designers and

²⁷ TINAG is also similar to the concept of *kayfabe* used in professional wrestling, where the scripted interactions and relationships between competitors and their teams are presented and accepted by commentators and fans as earnest.

players. Players could become immersed, but there was always an outside realm that could be revealed: the curtain could always come up.

That this boundary was missing with Ong's Hat – by design – made Matheny's endeavour an interesting experimental prototype, if not quite an ARG proper. Without clear demarcation and boundaries, the players who engaged in Ong's Hat's online iteration entered an all-pervasive state of play: all becomes play, or nothing is. Simultaneously, as players negotiated these boundaries – either in universe, or earnestly but always through visible participation – they contributed to the totalised text that other players engaged with. Speculation by the credulous and sceptics alike, expressed in forum posts, extensive piece of personal research, and links to other conspiracy websites, only added to the legend – forming further rabbit holes, extending the epistemic terrain, for others to fall down. When individuals took to Usenet threads or forums to discuss the legend of Ong's Hat – its veracity, their theories about it, their debunks – these contributions became part of the total story. Since this extensivity simply had not been an affordance when the *living book* was being animated by mail, the game's emergence online put the epistemic possibility of internetworked mediation into relief, with player-participants becoming enmeshed in the abundant, telematic "text" of the work – the player and platform at one in proliferating and thus constituting the story expanse.

As recognised by the computer-terrorised narrator of Eco's *Foucault's Pendulum*, "I believe that you can reach the point where there is no longer any difference between developing the habit of pretending to believe and developing the habit of believing" (1988, p. 386). The state of boundaryless play realisable as Ong's Hat proliferated online goes some way to explain why participants who had – knowingly or not – been able to shape the direction of the experience, either through playing along under the auspice of TINAG, defied the call for the game's cessation. When Matheny declared the experience done in 2001– ending the game by breaking character and admitting on his blog the Incunabula Papers were a fiction – he encountered a problem: not everyone believed him. Indeed, some were so immersed that they instead interpreted his admission as itself being part of the game; his message was be interpreted as just another

plot point, another clue. This reaction is reflected in the following quote from Dark Planet forum regular Harla Quinn, who simply refused to take Matheny's attempts to end the game at face value: "...my efforts toward untangling the quantum entanglement question for me doesn't end with an 'announcement'... The Majestic gamers will look for their clues and move on to the next level." (Kinsella 2011, p .142). In this landscape of information excess, Quinn and her cohort could rasterise their own frameworks of knowledge. This was not a game.

That Matheny's intervention could be interpreted and legitimated within certain communities as evidence that the story of Ong's Hat was real, and was being covered up is indicative of the type of fractured consensus reality realisable in participatory cultures, and as Jed Oelbaum has noted, presaged in some ways the emergence of contemporaneous phenomenon such as QANON (2019). Instead, Ong's Hat worked with participants both intertextually and interdiscursively, adhering to TINAG – an experience as enhancing as it was epistemically confounding. A piece of collaborative fiction some authors did not know they were contributors to. A game in which, for some, the denial of gameplay was itself understood as play. For others, Ong's Hat was not a game in the slightest.

In respect to this, Ong's Hat tells us another story – about how the formation of bodies of knowledge become co-constituted by what Zygmunt Bauman would call "liquid" conditions (2000) defined by "fragility, temporariness, vulnerability and inclination to constant change" and "forever 'becoming'...staying undefined" (2000, p. 100). The shape of this legend has traversed mail art to email, 'zines and alternative mail distribution networks, before moving to the vernacular, emerging networks of the web – Usenet, the blogosphere, and personal websites – transferred from hyperlink to hyperlink, added to, re-interpreted, and always unfolding as and through proliferation.

Perhaps Matheny's Ong's Hat could be likened to art for its unintentional prescience because it crucially required its participants to question the bounds and terms of what they could believe. In Yves Klein's *Zones de sensibilité picturale immaterielle* (Zones of Immaterial Pictorial Sensibility) (1959–62), Klein

rejects the need for art to exist or persist as physical object, and instead looks to acknowledge art in the production of affect through (immaterial) encounters. If the precondition of Klein's work is that the *encounter* with art must be understood as the true medium, regardless of whether one is looking at canvas, clay, or computer screen. Recounting this, one could interpret Ong's Hat as an arbitration of mediation. As observed by Jay Bolter and Richard Gruisin in respect to their concept of *remediation* "[the] excess of media becomes an authentic experience, not in the sense that it corresponds to an external reality, but rather precisely because it is does not feel compelled to refer to anything beyond itself" (1996, p. 54). Similarly, to encounter Ong's Hat was to encounter an authentic experience of medial excess, untethered from an *external reality*. Moreover, in ways similar to Byung-Chul Han's notion of a *positive dialectic* (2015, a concept considered further in Chapter Five), to encounter Ong's Hat was to be placed in the story whether you liked it or not; with active and passive engagements alike serving to proliferate this meme further regardless of intent. In that respect, Matheny's "art" was to prefigure the affects and effects of internet memetics, in all their epistemological excess.

A Stranger Comes to Town

That Ong's Hat was popular on Usenet is no surprise. Rumour and humour had long been embedded into the culture of Usenet, with net.rumor and net.jokes being the first non-tech Usenet groups to spring up, way back in 1981 (Templeton, 1989): a demonstration of users making use of the system in order to afford reconfigured forms of social practice. Given the social groupings present, it is also perhaps unsurprising that the subject of these rumours and jokes were tech-based. A common trope was warnings, more or less serious, about wayward technology, computer viruses and malware – which have been considered as reversionings of the moral panic/scare chain letters that circulated by post throughout the 20th century (Kibby, 2005). One example of this would be *Made Mad by Computer Game*, a story about a game called "Alternate Reality, the City" that would mesmerise players entirely, leaving them unable to eat, wash, or engage with any external stimuli (scotty, 1995). Another would be the rumour that a cabinet game called "Polybius" that became popular in and around the arcades of Portland in the early 1980s was

part of a shady government experiment. These stories were popular in these spaces as they reflected the interests of the communities, who in turn, would engage in the social practice of proliferation – that is, share them or otherwise contribute, instance by instance, to the collaborative narrative – recovered in this thesis as a meme corpus – being developed.

Polybius in particular became a sizable urban legend in the late 1990s and 2000s and, indeed, has since been deemed recognisable as an internet meme both due to its extensiveness and its duration ("confirmed" as an internet meme on knowyourmeme.com in 2011). Polybius was first referenced on a website: in a 1998 entry to (styled from here as Coinop), a "hobby site about arcade games" (Koller, 1998) (kurtkoller.com, accessed November 2020). Online since 1994, Coinop is a (now archaic looking, see Figure 20) website designed to catalogue arcade cabinet and home console videogames, launched by games enthusiast Kurt Koller along with a number of associates. As the work of amateur enthusiasts, the website persists at the time of writing as a simply constructed but functional site. It comprises five main navigable sections: "home", "games", "tech info", "articles", "about", and "contact us", with the majority of the content nested within the "games" section, which is essentially a catalogue of home and arcade games releases. Each game entry provides details about the product in question, such as name, maker, release date, and game description, while the catalogue can be browsed alphabetically or by year, as well as by search query. Coinop, in taxonomic terms, is pretty unremarkable. However, it does have one standout entry, which details a webpage that is more popular than others by some margin: that of Polybius.

The catalogue information provided within the Polybius webpage is fairly scant: "Game title: Polybius; Release date: 1981; Star Rating: zero – unrated". The field for "Game Summary" is concise: "We need information" (coinop.org, accessed October 2014). The post becomes odder as the entry continues, detailing how, for instance, Polybius had been subject to "bizarre rumours" upon its release, first appearing in "one or two" suburban videogame arcades in Portland, Oregon, having "supposedly [been] developed by some kind of weird military tech offshoot group...CIA or something". The (unrated) gameplay itself was described as unusual, appearing "kind of abstract, fast action with some puzzle elements", which seemed to inflict a range of ill effects on the gamers who played it – from amnesia to night terrors. Moreover, the Polybius cabinets were visited out of hours by "men in black", who seemed to collect "records" or data, but no cash from the machines. After a month in situ in their respective arcades, the machines vanished abruptly, with no Polybius cabinets appearing again: the anonymous author of the entry notes that Polybius seemed to simply vanish.



Figure 20. A screen capture of the Polybius entry on Coinop.org, taken October 2016

"Until the ROM showed up."

From the ROM, the post's writer/s share that they had uncovered some key details about the game: that it was designed for one or two players, and that its presumed creator was or worked for a company called

"Sinneslöschen" (a German neologism that roughly translates as "sense deletion"). The post's author also includes a call for information – a move inviting participation from readers. These discoveries are delivered to be read as a bombshell, with clipped language and an earnest call for further information about the game in question. Delivered in such a straight fashion, readers have no indication that they should read the entry as fiction. Rather, the listing appears sincere, and in the context of a genuine hobbyist catalogue, there is no obvious sign that Polybius is anything but an elusive and extremely mysterious computer game.

We Need Information

Whether Koller and his associates sought to deceive or trick visitors to Coinop.org that such a game did exist is not this chapter's concern. What is explored in this section is how the ontological constitution of Polybius brought forth distinct epistemic effects. It is worth briefly noting, however, that the *Made Mad by Computer Game* rumour first appeared on Usenet on February 28, 1995. This was one year after the Coinop site launched, and three years prior to when the Polybius entry was published, which may imply that the Usenet story served as inspiration for the entry writer – making *Made Mad by Computer Game* the originary story that was riffed and remixed as a result of the tale being re-posted and to an extent, rewritten and distributed from another platform.

For those finding out about Polybius – either though visiting the Coinop page directly, or by seeing the Coinop entry referenced in a Usenet forum or similar – would be given no indication that the entry was written in anything other than good faith. Non-regular visitors to the site – who would presumably be visiting the page after learning of the rumour, possibly being hyperlinked from a blog or a forum – would be even less well equipped to spot any tells on the page. The first-time visitor, or those encountering the page as a media artefact and its contents in a decontextualised manner, would not know, for instance, that the call for participation issued – *We Need Information* – was an unconventional intervention from the

page's anonymous creator/s. Nor would those users know that the level of response garnered in the comments section of the Polybius entry was markedly higher than on other games pages. The Polybius entry gave no indication that the story was false or based on an urban legend; rather, it looked like a genuine entry on a website that catalogued videogames.

Moreover, in the context of the time period, Polybius may have sounded feasible. In fact, it contained some kernels of truth. There really was a 12-year-old Oregonian - called Brian Mauro - who was hospitalised after playing an arcade game; trying to set a world record for playing Asteroids at his local arcade (as reported in Portland newspaper The Eugene Register, November 29, 1981). Mauro's illness occurred amid the burgeoning moral-panic around arcades and gaming that had been taking hold in the United States throughout the 1970s and 1980s (Kocurek, 2015; Newman, 2017). During this period, newspapers and anxious parents fretted over the dangers posed by these seductive and unsettling modes of entertainment to the youth. Soon after Mauro's story piqued concerns, two other arcade-instigated incidents entered public imaginaries: the fate of a 19-year-old competitive gamer called Jeff Dailey who had died of a fatal heart attack moments after posting a top ten Berzerk score of 16,660, and that of 18year-old gamer, called Peter Bukowski, having died in a similar manner, playing the same game at Friar Tuck's Arcade in Calumet City, Illinois. The moral-panic over arcades and computer games seemed to have some merit, if only for the fact that the stories about Dailey and Bukowski were... not quite true. A 19-year-old West Virginian named Jeffrey Dailey did die in 1981 - in a car accident (Despira, 2015). And there did seem to be an 18-year-old Peter Bukowski who died whilst in at the Friar Tuck's arcade in Calumet City, Illinois, as reported in the Chicago Tribune, April 27, 1982 - though the cause was Arrhythmogenic Right Ventricular Cardiomyopathy, a chronic condition. Additionally, the Chicago Tribune reported on March 22, 1988, that a 16-year-old youth was charged with murder after stabbing a 17-yearold to death at the same location, in an unprovoked attack ("Youth Charged In Stabbing Death", 1988).

Variants of the *made mad by computer* meme had also been refracted out via the realms of fiction, film, and TV since the 1970s – in output such as *Tron* (1982), *WarGames* (1983), *Arcade* (1993), and *eXistenZ* (1999).

The condemnation of technologies deemed disruptive was not a new practice. Just a decade prior to fear emerging around computer games, ire had been directed at so-called video nasties - in the 1980s, UK news reports pearl-clutched about bootlegged gorefests inspiring violence (Egan, 2007). Likewise, the real-life use of video games such as Battlezone (1980) in soldier training by United States Military (Mead, 2013) is resonated in the affiliation of Polybius with a supposed military-offshoot project concerned with mind control. Similarly, also present in Polybius are the ambient men in black figures haunting U.S. imaginaries since the UFO flaps of the 1950s (Keel, 1975) which had emerged alongside the country's militarisation. Indeed, Polybius even contains an echo of the Church Committee cited in Chapter One. A New York Times splash from 1974 issued in response the disclosures made public as a result of the Church Commission has synergies with the plot of the Polybius myth ("NYT Reveals CIA Spied on US Citizens for Decades", New York Times, December 24, 1974) which dramatically disclosed how the U.S. Government's Central Intelligence Agency (CIA) - responsible for gathering, processing and analysing national security information - had been conducting large-scale surveillance on its domestic citizens since the 1950s. This distrust manifested in literature (Richard Condon's The Manchurian Candidate (1959), Don DeLillo's White Noise (1985), J. D. Salinger's Catcher in the Rye, (1951), and Bob Shea and Robert Anton Wilson's Illuminatus! Trilogy (1975), films (All the President's Men, directed by Alan Pakula (1976) and Jacob's Ladder (directed By Adrian Lyne (1991), and artworks (such as Jim Shaw's Martian Portraits (1978) and Louise Bourgeois' Cell (Eyes and Mirrors) (1989–93). Of course, as the 20th century drew to a close, anxieties over arcade games in the 1980s would cede to concerns about computer-based forms of leisure, such as domestic gaming, the use of personal computers, "headphone hysteria" - which in turn would cede to widespread anxieties about the disruption caused by increasingly ubiquitous mobile phones, portable media and personal devices, screentime, and, of course, social media (McRobbie, 1995); Valentine, 2001; Thiel-Stern, 2014; Anslow, 2016).28

²⁸ Indeed, the reflection of anxieties in cultural production is an established phenomenon. In past centuries, equivalent fears emerged about the disruptive properties of the mass-produced novel (which itself was part of a distinguished tradition of fearing literacy), with specific concerns arising around the gothic genre – such works as *The Mysteries of Udolpho* by Ann Radcliffe (1794) and Matthew Lewis's *The Monk* (1796), with both authors being accused of corrupting moral character, particularly those of young women (Punter, 1980). In this broad context, it is possible to parse each specific iteration of the moral panic as a means through which pathologised fears about the upending effects of socio-technical developments could be explored. One might even say that the moral panic as a cultural phenomenon is a form of meme.

This context – ambient public concern around a new form of youth culture, spiked with incidents and hearsay – indicates that societal concerns about Polybius emerged from what folklorist Robert Georges may have called a "storytelling event" (1969): a term that refers to narratives made up of "many different and interrelated aspects, all of which contribute to and are at the same time part of the whole" (p. 316). reflected. Given the time of writing, Georges was of course referring to storytelling events that, though distributed, were animated by non-digital means. Yet Georges' premise in entirely applicable when conceptualising the emergence of Polybius (and Ong's Hat, for that matter). Indeed, the notion of a storytelling event possesses similarities to Henry Jenkins' notion of "transmedia storytelling" (2007) and Matheny's *living book* – which in respect to phenomena like Polybius describes a narrative that is both mediated, but more specifically proliferated – and thus co-constituted – by multiple media types.

However, there is tension to be found in deeming Polybius the product of transmedial storytelling. Jenkins's is well known for championing the agency of those engaging in participatory cultures, making clear that there was empowerment to be had in the forms of community formation, particularly perhaps community fandoms, that were made possible online. Yet, in respect to Polybius, and too Ong's Hat, though some participants were "actively" proliferating the story – intertextually reproducing or remixing artefacts, text, images, sharing hyperlinks, referencing it – others were less aware of their role, as evinced by the forms of participation garnered by Ong's Hat. Those passive or unaware participants would *interdiscursively* proliferate the rumour, be that by credulously believing the tale, or else by reacting to it in a way that created a materialisation of the interaction – in effect passively creating meme instances.

Importantly, in making this assertion it must also be noted that I am claiming that memes can proliferate though social practices, whether or not the act of proliferation was engaged with the explicit intention of contributing to the meme. That is, in the context of this chapter, the effects of credulous and sceptical, earnest, or manipulative contributions alike all furthered and agglomerated into a shared idea. Contributions of whatever valence could be committed to tertiary memory. Consider the comments section of the Coinop entry. This section, where page visitors could comment on the page contents, contained more than 100 contributions spanning from 2003 until 2009 (as of October 2014) and sees some commenters decrying Polybius as a ruse, (such as marminZ80 who commented on March 15, 2005: "Sorry folks, it's a hoax"). Others, such as from user Ded, seemed to implore readers to take the story seriously, citing experiences with the game and its developer: "If you get it DONT PLAY IT. I had to come and warn anyone who will listen" (added January 26, 2004). The earnestness of Ded's reply is impossible to parse. However, in the context of the contemporaneous ambient moral panic and rumours circulating about computers and their deleterious effects, and the relative novelty of web technologies in domestic settings at the time that the Polybius Coinop page appeared (Bakardjieva, 2001), it is not unreasonable to assume that some readers who encountered the Coinop entry would have interpreted it as if it was a genuine piece of cataloguing – and a sincere note of caution. Some commenters tried lending credence to their warnings by claiming to be associated with the arcade owner -a discursive tactic that Jan Brunvand would call friend of a friend, or FOAF - with FOAF a common occurrence in oral and written folklore and the telling of urban legends used by those who seek to convince others of the credibility of their story (Brunvand, 2001). Ultimately, not having clarity on the stance of commenters is the indeterminacy that generates further engagement with Polybius - that is, that those who encounter the Polybius web page are inspired to add to it, or else include it or reference to it in other discourses. That is, that reactions to interpretations of Polybius are the individual contributions - meme instances that served to proliferate, and thus consolidate the Polybius as a meme, instances that comprise a corpus; with this proliferation and consolidation occurring whatever the intent of the contributor, and however credulous or sceptical they are.

It is in respect to this dynamic that recovering technics as they afford the practice of proliferation elucidates both why memes, as instances, and therefore as corpuses, take on aesthetic and affective qualities. The comments box on the Coinop web pages, for example, allows contributions to the Polybius a consequence of the web page being designed and coded in a way that supports interactivity though the invitation and publication of user engagement. Within that design decision alone there are arrays of technics at play: the programming language used, and the code produced, the server where the site is hosted, the (presumably) compatible web browser from which the site is accessed, the TCP/IP protocols, the physical infrastructure of the internet, and the computer being used for access. Additionally, the comments box on the Polybius entry exists in relation to forms of networked sociality cultivated across digital spaces, meaning that the impetus to allow and cultivate comments is itself a practice that exists in relation to wider forms of participation cultivated on web technologies and their social use. Due to the inclusion of a comments box in the page's code, the Polybius meme, as it existed on Coinop, was able to exist in multiples – as the original entry *and* the participatory responses gamered. These accretions were, and remain, not mere addendums – they become part of the total text. In this way, we must see Polybius as an iterative, open-ended text that is told via asynchronous participation – a modality only possible due to the way in which the meme was mediated.

Old Stories, New Media

Mobilising this argument further, I wish to suggest that Polybius can be interpreted as a sound example of how new modes of memetic social practices were being afforded via web and latterly internet technologies. Reading Polybius in this way reveals both how internetworked technics create an intensification of meme proliferation, and thereafter, ways in which internet meme proliferation shapes life-worlds in ways distinctly afforded by their technicity. Borrowing a term from literary theorist Stanley Fish (1976), the Polybius meme began to proliferate as it was debated by *interpretive communities*; invested social groups emerging on Usenet, web forums, or communities connected by web mediated networks, who would debate whether Polybius was fact or fiction (hearsay or hoax). Which are the *interpretive communities* whose recognition of Polybius and either intertextual or interdiscursive proliferation of it rendered the phenomena a meme. This framing has synonymity with Sonia Livingstone's rearticulation of publics as a grouping bounded by a shared network-mediated texts (2005), with the acts of community-based interpretation occurring online being negotiated differently due to their modes of mediation. Digital

culture scholars have theorised how negotiations by *interpretive communities* require an emphasis on boundary policing or "maintenance" – essential for the formation of distributed, networked and sometimes anonymised community groups (Bialski and Batorski, 2009; Coleman, 2014; Massa, 2017) dubbed "communities of practice" by Sage Graham (2019). Comprised of sometimes large, asynchronous, perhaps anonymous participants, communities of practice needed to form social bonds and through undertaking and performing knowledge work – which functioned to establishing trust in non-proximal social contexts (Zaphiris, 2009). Communities of practice then, can be understood as negotiated through the demonstration of community knowledge (or not) and the consolidation of consensus around a driving concern – such as, whether or not an arcade game called Polybius ever existed.

I suggest that while Fish's notion relates to reader-responses to literary work, audiences who share imaginaries animated through shared readings of texts, the formulation also applies to the emergence of *gramme* brought forth through social uses of (web and internet) technics, which in turn becomes the aesthetic and affective meme forms dialectically recognised by online communities, and which provide means for online communities to recognise themselves. In parsing and participating in internet memes as *gramme*, and in doing so demonstrating a "deep subcultural knowledge" (Miltner, 2018. p. 423), the techno-social constitution of memes are the terms along which community knowledge, boundaries, and mores are negotiated. This concomitantly locates technics as that through which memes are proliferated and as implicated in the bringing forth and the epistemic frames through which life-worlds are parsed.

More, in accounting for the distinct affordances web technics brings to these deliberations the implication beyond the immediate effects of digital proliferation are revealed. In respect to Polybius, the immediate aesthetic and affective qualities this meme was imbued with relates to, as described, it spread at hitherto impossible speeds, scales, with the possibility of reaching extensive demographics – which added richness and complexity to the texture and epistemic complexity of the story. Additionally, the persistent quality of this *gramme*, consolidating into a meme, becomes clarified, with the individuated contributions to Polybius committed as *tertiary retentions*. More, as digital artefacts – digital records – such retentions are oriented towards ready onwards proliferation, which in turn inculcates further individualised contributions. Dialectically of course, these instances will go on to asynchronously reconfigure the meaning of the wider (and in the case of Polybius, increasingly confounding) meme-as-idea, expressed as corpuses comprised of evolving significances and meanings and the recursive generation of variegated individuated contributions. Once more, the ontology and phenomenology of the meme are both interrelated, and constitutive of a meme's significances to, and within, life-worlds.

In persisting as text, image, video, sound, discretely or in combination, which can in turn form the basis of further contributions of a kind, the grammatised instances that comprised and still comprise Polybius – comments, playthroughs, fake ROMs, heated discussions about the story's veracity, all forms of TINAG and credulity – are those things that undergird the Polybius meme's place within the cultural milieu. And it was an emergence that has encoded within it, instance by instance, the iterating techno-social conditions of its emergence. That the most banal-sounding decisions – whether to code up a comments box on an obscure website or not – can have far reaching epistemic consequences, is in its finitude, a clarifying example of the frothing complexity inherent proliferation as it occurs within web mediated techno-social milieus.

Digital Footprints

Couched so, and remembering Kirshenblatt-Gimblett's observation from the beginning of this chapter, the mode of proliferation that accounted for Polybius' spread was not a direct translation of what had gone before. Rather, the mode of proliferation Polybius was subject too was newly reconfigured as a result of the co-constituting role of technics. And though I am unwilling to adopt the term "new media" to characterise the technical array in question, I would say the defining quality of digitally mediated social practices, in an ontological sense, can be understood in relation to what Lev Manovich called the "programmability" of digital mediation inherent to internet technics (Manovich, p. 27, 2002).

This is to say that the distributed, many-to-many modality enabled by web technologies was not, of course, merely an amplification or the non-broadcast distribution afforded by the co-option of reprography in alt media production. Rather, the imperative to engage in participatory networks was sustained, but mediated in an unprecedented way as a result of the programmatic technics of computation. Specifically, the language of computer programming, itself unthinkable beyond its medial substrate of hardware (which in turn, without software is little more than a formation of metals and hydrocarbons) that affords the interplay between server, service provider, database and user-facing digital platform is a unique technical milieu due to its rendering of cultural phenomena into mathematical representation. Thereafter, the development of digital products, bother server and client side, enable both a scaled, distributed and participatory modality of engagement, within which, the reproduction, remix, and proliferation of cultural content is rendered – like copy/paste – both *an aesthetic principal and cultural technique*. That is, that the technics which afford proliferation become inherent to the valences inherent to *gramme*, and therefore memes, which emerge from this social practice.

It is the digitality of web media that imbues memes, such as Polybius, with novel aesthetic of affective attributes which through social use create configurations of meanings, and experience, studded with proliferations of contents, form, and stance that, though a continuation of sociality, due to their co-constituting technics have, after Manovich, "no historical precedent" (2002, p. 47). Thus, the distinct ways in which digital media – such as those arrays in which Polybius began to proliferate – must be recognised as affording speeds and scales of engagement, inclusive of near instantaneous reproduction and remix (or "variability" (p. 37) understood as an *aesthetic principal and cultural technique*. In turn, the medial instances produced through digital proliferation are committed as persistent elements of cultural, tertiary memory which again, is co-constituted by, and representative of, the contingent interplay between the (digital) technical and the social. Indeed, the analysis provided by Manovich in the aptly titled "*The*

Language of New Media" (2002) can be read to serve as a response to Kirshenblatt-Gimblett's observation that digital media was generative of a new form of expression and social practice: one reconfigured through the use of digital technics.

Importantly, these were technologies *in use*. Each intervention, was of course, created by a person who was participating in the social practice of proliferating the Polybius meme, either credulously, or in the knowledge that to add to the meme was a form of play. That these participants added to the meme through engaging with digital media forms – browsers, hyperlinks, editing software, forums via user profiles, video hosting sites, comment sections, social platforms – imbricated the technics and aesthetic techniques of these media forms as constitutive of the story of Polybius that emerged. The meme, therefore, was co-constituted by technics animated by social use. As argued by Olga Goriunova "A meme... is not only 'content', but a behaviour, or rather systems of human-technical performances" (2013, p. 56): which is to say the memes that emerge are co-constituted by and uncoupleable from the ontological arrangements of technical media that proliferate them.

And these forms of practice are traceable, observable – *monitorable* – having been accumulated as tertiary retentions and associated cultural memories as digital record. After being posted up to Coinop, Polybius was first referenced on Usenet on Feb 27, 2000, in the group rec.games.video.arcade.collecting (accessed May 1, 2019). There were additional responses contributed on April 12, 2000; April 11, 2001; and September 26, 2003. From this we know that each of these exchanges saw participants debate the veracity of the original Coinop post, before, by July 2003, Polybius appeared in the hoax-busting snopes.com message board (accessed May 11, 2019). Its inclusion on snopes.com is indicative that, by 2003 at the very least, Polybius was thought to be a hoax in need of debunking. Conversely, the following month, Polybius was debated as a truth to be disclosed on pro-conspiracy site AboveTopSecret.com (accessed May 1, 2019) – indicating that at the same time, Polybius was being considered as a coverup. By 2004, a dedicated website PolybiusTheory.com was created with the intention of collecting all the available information about the game, with a member of the Guru3D forums claiming to be in possession of an

emulator of the game (though this was later revealed to be an .EXE file simulation). This particular riff enhanced the corpus by producing a piece of original rich media, which in turn, was further proliferated – shared, remixed, reversioned, and of course, debated.

Accordingly, the rumour that such an emulator existed travelled from message board to message board, with users proffering updates, such as this 2004 post to forum.digitpress.com: "The long rumoured rom file for Polybius has been located..." (accessed January 2016). This added weight to the story that Polybius was a real game after all. By March 20, 2006 (*eight* years after the initial post went up), a user called stevenroach posted to the comment section of the Polybius entry on Coinop, which provoked a response from the Coinop authors. Roach's contribution was, on face value at least, an attempt to "lay to rest" speculations about Polybius. Roach claimed that, in the early 1980s, his company Sinneslöschen had been contracted by a South American firm, whose aim was to bring a "new approach" to the gaming industry. To answer this brief, Sinneslöschen claimed to have eschewed the shoot-em-up convention, and instead created a fast-paced game that pioneered an abstracted visual style, later made popular by Wesson International's *Moon Base* (1990). However, Roach continued, and Polybius never became a mainstream hit, due to being pulled from arcades soon after initial release. The reason for this, according to Roach, was dramatic. In 1981, six days after Polybius was made available to the public, a thirteen-year-old boy from Portland, Oregon had an epileptic seizure while playing it. In response, Roach claimed his company had to quickly remove the seven cabinets out of arcades – and Polybius never saw daylight again.

The *new information* disclosed by Roach in 2006 became an inflection point in the Polybius storytelling event. Piquing interests, and provoking reactions, Roach's contribution saw the legend extend and proliferate further still. Roach's claim was reposted on the Retro Gamer message board on March 22, 2006, two days subsequent to Roach's intervention (accessed May 1, 2019). This, in turn, prompted some crowd-sourced sleuthing from forum goers. By September 2007 – about 18 months after Roach's contribution to Coinop – a Retro Gamer forum user, going under the moniker "Codename MAT" published a post claiming that the "Steven Roach" account, along with those for Retro Gamer users

"Sutekh" and "RivaOni" (who often posted in support of Roach) were sockpuppets. Codename MAT claimed that these three shill accounts shared a single IP address (retrogamer forum, accessed May 2016), indicating that they were run from a single machine – and so suggesting that Roach was a fraud. By May 2009, the Coinop entry itself was republished with a repudiation of Roach, reading: "Quick update, we just wanted to go on record here that Steven Roach is full of himself, and knows nothing about this game." The Polybius communities – aggregating in forums, comment sections, and the blogosphere – were back to square one. And so it continued.

From the Coinop webpage and its design, to Usenet groups and the techno-social practices they realise, to forums and the techno-social mores and sensibilities cultivated, Polybius proliferated. The extensivity of Polybius has and will continue to present contemporary readers with a complicated legend to parse. In this respect, Polybius also speaks to the epistemic challenges that emerge from social milieu in which internetworked digital media play a constitutive role – when the human and the technical conspire and proliferate meme forms that, as a consequence of their technicity, are persistent, retrievable, remixable, recontextualisble. As Kirshenblatt-Gimblett (1998) observed, this techno-social condition was something new, and could not entirely be parsed by the old rules – being made new, after Manovich, due to the *unprecedented* technical qualities of computation and digital technicity (2002).

For many contemporary internet users, Polybius has been online, or perhaps has even existed, for longer than they have. From the proliferation of the Coinop story, supplanted by hearsay and roleplay, and co-constituted by the conditions of Web 1.0, the story would continue to develop as the myth continued to spread within by Web 2.0. By the time the Coinop page was last updated -2009 - 1.73 billion people were online, compared to ~350 million on 1998. By 2009, YouTube had launched, MySpace had already given way to Facebook, Twitter was on the ascendance, and Instagram took the reins from Hipstamatic. The web was no longer surfed in computer rooms – and smartphones were available, as media became ubiquitous and mobile. The age of platform predominance in other words, was here – as was the internet meme as recognised cultural phenomena, as will be explored in the next chapter.

For now, I wish to point out how within this generative array, Polybius would too inevitably iterate and extend by virtue of its ongoing proliferation – and materialisation - across and between these conditions, and has taken on new qualities and occupied an accreting epistemic frame through its ongoing iteration. Polybius would first appear on YouTube in 2007 upload entitled "Polybius found" (accessed May 1, 2019). This particular meme instance – a film which depicted a simulated discovery of a Polybius game cabinet by an intrepid detective – was created as if it were "evidence" of the game's existence. And that this meme instance, which in pantomiming as evidence proliferated Polybius both interdiscursively and intertextually, was evinced as a piece of faux documentary footage, was itself a materialisation responding to a grammatised form of cultural production cultivated by the affordances of video-sharing platforms such as YouTube. It would be down to those who stumbled upon these instances, these tertiary traces, to determine – or perhaps to choose to believe – whether these pieces of "evidence" were genuine or not, and thereafter, whether to feign belief for fun, or not, if those who encountered the Polybius meme chose to actively respond to it at all.

Of course, other forms of "evidence" were presented in this manner; such as "playthroughs" of the game discovered on CD-ROMs replete with commentary (a precursor to contemporary streaming), photographs of the Polybius cabinet or gameplay, or (more simply) claims to have seen the cabinets first-hand, or having heard about them from a *friend of a friend* – with each instance, each reproduction, remix, and act of proliferation recoverable as a *cut* through which the techno-social context from which it emerged can be glimpsed. Further such instances would, over the 2000s and 2010s be forthcoming as a consequence of sizeable media outlets beginning to cover Polybius in their beats. It became the subject of numerous blog pieces and articles – including at SkepticBlog (March 5, 2009), Den of Geek (November 30, 2009), and Motherboard (October 31, 2010) – oftentimes described as on ongoing mystery rather than a hoax. Structurally and narratively open, and materialised across myriad interrelated media arrays, Polybius too was taking the form of a *living book*, albeit with no one architect, or as Eco would have it, a *work in morement* (1989). By August 2011, with the Polybius meme being comprised of myriad artefactual

forms and concomitant narrative elements, whether generated from the story's receipt as fact or fiction, had proliferated enough to be codified as a meme on cataloguing website Know Your Meme (knowyourmeme.com). The role of meme aggregators sites in the grammatisation of internet memes will be considered in more fully in Chapter Four. But for now, suffice to say, that Polybius' ratification as internet meme – replete with cataloguing information and contextual information that expounded the contested status of this story of *made mad by* computer – marked a significant inflection point in this phenomenon's entrenchment within cultural memories. In being explicated and annotated so comprehensively on Know Your Meme, Polybius was further afforded inclusions within cultural discourses, as participation in the mythos continued – as is indicated by Polybius' ongoing proliferation over the years. As of April 2016, there were 36,400 You'Tube search results for "Polybius game", and 211,000 results offered up by Google, with the additional interventions accumulating as retrievable, remixable instances of this meme.

To a degree, Polybius was a meme *par excellence* for the rumour and humour-laden Usenet and *weird* wide web burgeoning at the turn of the millennium. As with Ong's Hat, it resonated with the Discordianinflected, puckish, conspiracy-debating discourses that emerged as web users explored and contributed to an extending epistemic regime that was calibrated through technics. New realities, experiences, and social practices were being forged, with from a media ontological array that was itself was weird, wild, and immature. And memes, though still then a loosely defined concept and phenomenological object, can be seen as central to this sprawl.

In the context of ongoing proliferation that I am suggesting that Polybius can be read as something of a cipher, speaking to the ways that the affordances of networked digital media – the technological assemblage of the internet – are oriented to the production memes though its social use, with proliferated engagement rendered object of record once materialised. And further, this generativity occurs at intensive and cumulative rates as afforded by the unprecedented programmatic capacity of digital technics used in social practices. In proliferating in a novel, relatively frictionless manner from website, to Usenet, to

message board, to website over the course of two decades, the legend of Polybius – comprising media assets and networked interactions– was at every pass, every iteration, co-constituted by the affording programmatic mechanisms of the array of technologies that comprises the internet. Once more, when considered a meme comprised of myriad meme instances, analyses of Polybius reveal the iterating conditions of its emergence.

As a *storytelling event*, Polybius warns us of being *made mad by computer* – perhaps an apt warning given the epistemic challenges discussed in this work. Yet it is as a *meme* that reveals the reconfiguration of the techno-social. Echoing Moira Smith's (Smith, 2009) call to pay attention to how, rather than which folk stories are proliferated, Polybius' proliferation can be parsed to reveal the distributed programmatic technicity of *internet* memes being realised as such – or how the internet makes internet memes distinct.



A scene from episode 3, season 18 of *The Simpsons (Please Homer, Don't Hammer 'Em*, first aired September 24, 2006), where Bart enters an arcade and walks up to a machine adjacent to a Polybius cabinet marked as 'property of the US Government'.

Conclusion

The consideration of meme proliferation detailed in this chapter has explored how ontologies and epistemes exist in dialectic, techno-social relation. Through addressing examples which speak to the changes that occur when bodies of knowledge began to be co-constituted by internetworked mediation, this chapter has once more has argued that memes proliferate. Moreover, this chapter has begun to consider the ontological and epistemic shifts that occur when memes proliferate on the internet. Therefore, in taking a look at the early days of the web, when vernacular storytelling events were becoming co-constituted the technological arrays and social interactions that comprise the internet – and in so being began to proliferate as internet memes – the focus of Chapter Three has been to parse how those the techno-social conditions present brought forth these putative memes in distinct ways; and what in turn, these memes can disclose about their conditions of emergence.

Emergent knowledge (always-already) iterates in dialogical relation the dynamic and aetiological technosocial conditions extant to them. In first considering Ong's Hat as a meme – and as a cut – it is possible to see how proliferation realised across web technologies reconfigured the architecture and narrative structure of a multi-player game. A game without a clear boundary in place, Ong's Hat demonstrated how technically-afforded proliferating excess generated epistemic breakdown, to the extent that for some Ong's Hat was no longer perceived as a game at all. Similarly, in revisiting the Polybius meme, the distinct ways in which proliferation as realised across web and internet technics is evinced. The consequence of Polybius' spread was to cultivate a corpus that could have no totalising narrative. As such, Polybius is suggested to be indicative of techno-social conditions of emergence in which the production of knowledge, and tertiary memories contoured therein, are reconfigured through the constituting force of technics – and the profound epistemic effects realised in concert.

In both case studies the constitutive role of technical media has been considered as a precondition that animates and co-constitutes the meme forms that emerge, and their significances. Broadly then, this chapter has sought to continue the claim that proliferating memes of any form are contingent on the interplay between the technical and the social, while introducing the particular significances of internetworked digital media technologies in this formulation. The examples in this section have spoken to that shift as they were uniquely timed, and how they can each in their own way have their roots identified in a prior media regime, and in tracing the genealogy, differences and distinctions are brought into relief. This chapter has also begun to explore how effects specific to digital technologies broker techno-social relations.

Per Bataille, the telematic society (1985) that Ong's Hat and Polybius proliferated through is always overproductive of information; materialised, stored, retrieved, and reversioned. In turn, a subject encountering telematic excess may, in response, become prompted to interpret all the information they encounter.

More, that Ong's Hat and Polybius are not perhaps obviously internet memes to many, or perhaps have evolved to be so over time, is testament an implicit dynamic this chapter speaks to – that internet memes themselves are not a phenomenon in stasis. As this thesis argues, memes emerge from proliferation, and so will materialise in different ways contingent on the technical and social conditions at play. Given that neither the internet, nor the social arrangements realised across and through it remain constant, then it follows that the memes that emerge on the internet must be recognised as things that emerge differently, and contingently, and to different effects.

So, while the "internet meme" is often spoken of as a particularised phenomenon, to characterise them in such a manner, while an acceptable shorthand, is in phenomenological terms too reductive by far. The internet meme itself, as corpuses of instances contingent and co-constituted by proliferation, must be understood as an emergent phenomenon, lent *whatness* by technics, but retaining *thisness* in respect to their ontological configuration.

Chapter Four: Reconciling With the Irreconcilable

Contingent Histories

It was the 1990s when, as Richard Thieme put it, *memes began to appear on the internet* (Thieme, 1997). As expressed in this thesis' introduction and explored in Chapter Three, these early internet memes were a somewhat diffuse phenomenon. Taking the form of shared ideas – trends, tropes, and jokes – that proliferated on message boards, blogs, and forums – "particular [ideas] presented as a written text, image, language 'move''' (Knobel and Lankshear, 2007, p. 202). Memes that began to appear on the internet then, was just the *stuff* that circulates online (McKenzie, 1996). As such, these memes were apprehended *as* memes in respect to their ontological configuration (being comprised of numerous instances that aggregated into a legible corpus) – but they had not yet been taxonimised and catalogued as lexica. Early internet memes were legible as memes, without being fully consolidated as vernacular.

This was to change of course. By the late 2000s and early 2010s, memes that emerged on the internet became increasingly established as *media lingua franca*, replete with rules and conventions entrenched though, and as, social practices. As noted in this thesis' introduction, the community-led sorting of memes into stipulated series and templates – known as "exploitables" – was, for Ryan Milner the creating of a "folksomony" (2013a) (or "folk taxonomies" per Gabriele Marino (2015)). The reproduction of exploitables – be they Image Macros, reaction GIFs, Rage Comics, or any other recognisable format, content type, and aesthetic convention – made their proliferation apparent. The recognisable "fixed" element within the exploitable was the point of reference within each individuated meme instance that associated them with a corpus – and therefore key to the mechanism that associated one internet meme instance legible as part of a corpus: and moreover, apprehensible as an internet meme at all. Metered by such "tropes, colloquialisms, conversational sequences", exploitables afforded what Milner called "prepatterning" – a language convention which "fixes the conversation and restricts participation, [but]

also affords depth and expression" (p. 3). As such, the establishment internet meme exploitables undergirded the viability the internet meme's utility as vernacular. By laying down what Limor Shifman referred to "beaten tracks" (2013a), via which meme creators and readers alike could understand the conventions in play and moreover parse their contextual meanings, exploitables served to codify the "stuff" that circulates online into a lexicon.

While the internet memes analysed by Milner, Shifman, and others, demonstrably were functioning as vernacular, I would also like to suggest that memes that appeared on the internet were predisposed and oriented towards codification as *media lingua franca*. Having emerged as digital artefacts – the *stuff* that spread across online fora, that over time were consolidated into folk taxonomies – memes that emerged on the internet had the specific, techno-socially afforded capacity to be consolidated into recognisable lexica. As digital artefacts – that were published, shared, reproduced, remixed, and retained as digital records – internet memes emerged in a manner and context that predisposed them to being sortable, referenced, and reproduced. Admittedly, when recalling the emergence of this sparkling, complex, humorous, and antagonistic meme lexicon – collated by quick wits and community labour, and comprising of elements of culture ephemeral and deep – pointing out that the memes in question were formed of digital artefacts might sound like the least interesting aspect of this phenomenon, if not decried as entirely redundant: That the digital medium of the internet, accessed via user interfaces of one form or another, will realise digital artefacts might seem to be a given.

However, considered in line with the perspective developed in this thesis – which advances that memes are definable as such in respect to their ontology – the array of technics shorthanded as the internet must be understood as not as being arbitrary delivery mechanisms of memes, but instead recognised as being co-constitutive to the memes proliferated through its use. Internet memes are not communicative digital artefacts that *just so happened* to emerge online; instead, they are materialised emergences which have communicative utilities supplied by their proliferation on the internet. That is, internet technics are entirely intrinsic to the communicative utilities that internet memes have and continue to demonstrate.

Central to this viewpoint is the assertion that the technics of the internet imbue internet memes with their aesthetic and affective attributes, by virtue of meme instances and aggregate corpuses materialising in ways contoured by media affordances. And it is only thereafter – once internet memes emerge as ontological configurations recognisable as such due to the aesthetic and affective attributes afforded by the internet – that internet meme instances, legible as corpuses, become stipulated as vernacular. Which is to say that internet technics must be recognised as constitutive not only to how, but also *why* these internet memes are recognised and function as vernacular. Internet technics are preconditions for the (after Bernard Stiegler, 2010) *grammatisation* that internet memes undergo, and thereafter their codification into lexicons replete with language rules and conventions.

To that end, it is also worth revisiting the "vernacular turn" in internet meme scholarship, to reconsider how internet technics were themselves implicit in the emergence of this academic mode. For, if both the consolidation of internet memes as vernacular within online communities, and thereafter the attention paid to internet memes as vernacular by scholars were preconditioned by the technics from which this meme form emerged, then the "vernacular turn" too can be historicised and contextualised in respect to the interplay between the technical and the social. That is, the "vernacular turn" in meme scholarship is itself is a consequence of memes emerging on *the internet*.

This chapter will consider this suggestion by exploring the constituting role of internet technics in the codification and subsequent grammatisation internet memes, and thereafter their codification into vernacular. Drawing on the thinking of Olga Goriunova (2013) in synthesis with the Stieglerian theoretical perspective of technics as irreducible from the social, I will recount the techno-social history of two well-established internet meme formats. In particular, this chapter will account for the ways in which the constituting affordances of technics both facilitated the emergence of internet memes through their social usage, and resulted in the meme forms produced becoming codified as vernacular. In making this case, this chapter will also demonstrate how (internet) memes can function as an analytic device, via which their conditions of emergence can be parsed, and recovered.

The first meme addressed in this way is the humble Image Macro – a type of image-and-text-based meme that entered internet and wider imaginaries from the late 1990s onwards. In considering the "vernacular turn" in internet meme theory, I will propose that the Image Macro emerged as a recognisable – and for some archetypal – *internet meme* format as a consequence of a contingent techno-social history. In this account I will revisit how this meme type emerged in line with social practices negotiated through internet technics, having been – somewhat infamously – contoured by the 4Chan message board, before being more latterly amplified by the contemporaneous availability of meme generator tools. Moreover, I will suggest that before gaining traction on 4Chan, the Image Macro had already emerged as a result of a lesser-known techno-social history – in which antecedent forms social practices and the technics of Web 1.0 must be understood as co-constitutive. In noting this, I will argue that the Image Macro emerged as a media *lingua franca*. In making this point, this case study once more asserts that the techno-social conditions of emergence have had a constituting bearing on how internet memes have been apprehended, codified, and utilised as vernacular within cultural contexts.

In the second case study of this chapter, I consider the GIF. A format commonly used within online discourses, with its animated quality lending it a specific form of expressive utility, the GIF, like the Image Macro, has a history entirely entwined in the of internet technics and their social usages. The GIF, as I will recall, became grammatised in relation to browser capabilities, bandwidth, the mores and etiquettes of image boards, before being consolidated into vernacular within community settings within social platforms such as Tumblr, and through the emergence GIF aggregators and generators. The trajectory of the GIF detailed in this chapter therefore demonstrates how, as with the emergence of the Image Macro, types of memes emerge as vernacular in ways constituted by technics as used within social milieux – and evinces the varying forms of memes that can emerge contingently.

Together, as a *cuts*, glimpses into a constellation of moments that produced grammatised, readily reproducible meme formats, the case studies in this section reflect once more the specific ways in which the technics of the internet materialise internet memes distinctly, which in turn affords internet memes vernacular qualities, which have been the focus of much academic attention. Once more, a historical method is applied both the clarify the claim I am making in respect to understanding memes through their ontological configuration – through proliferation – and underwrite its salience, given that even within the techno-social conditions characterised by internet usage, the meme forms that emerge do so in highly contingent and ever evolving ways. This chapter then, not only considers how technics are instrumental in the materialisation of meme instances and to what effects – instead the ways in which memes have undergone grammatisation *on the internet* is suggested as instrumental in their consolidation within cultural imaginaries.

Internet Memes, Theoretically Speaking

The first (somewhat) mainstream media article about internet memes was published in 1994, in *Wired*. Called *Meme, Counter-meme*, by Mike Godwin, this piece was an explainer of sorts – introducing the term "meme" to the unitiated, and outlining the significances memes had within an informational social environment. Cautioning that internet memes can be instrumentalised by good and bad-faith actors alike – an observation that presaged to some degree the debates around "meme warfare" that emerged three decades later – Godwin invoked a Dawkins-inspired physiological conceptualisation of these phenomena:

A "meme," of course, is an idea that functions in a mind the same way a gene or virus functions in the body. And an infectious idea (call it a "viral meme") may leap from mind to mind, much as viruses leap from body to body. (para. 3)

The publication of Godwin's article marked a watershed moment in the consolidation of internet memes into public imaginaries, with *Wired*'s cultural cache and powers of amplification imbuing the notional meme with import. Yet Godwin's memes were not taxonimised artefacts. They were infectious ideas, spreading in rapid and formative ways online. These memes were to be engaged with in caution. In essence, by couching internet memes as persuasive ideas, transmissible at new speeds and scales online, that could "leap" into the mind of the human internet surfer, Godwin was adhering to "classic" memetics – positioning memes as a form mind-virus imparted through the creation and exchange of online discourses. That is, that the encounter with an internet meme opened up web users to the "risk" of being infected by an idea. The significance of the internet meme for Godwin then, was the rate and range by which these idea-carrying memes could spread, due to the digital and distributed model of transmission afforded by the internet. Yet interestingly (though perhaps, predictably) beyond being *ideas that spread online*, Godwin's treatise paid little mind to what in ontological terms internet memes are.

In fairness, Godwin was not alone in this omission. The emerging cohort of thinkers engaging with internet memes were generally aligned in positioning them as *persuasive* entities; that is, replete with a particular communicative utility. For Jamie McKenzie, memes were *ideas* that spread online (1996). For Alice Marwick, the term meme was a metaphor for *internet culture* (2013). For Knobel and Lankshear (2007) memes were social phenomena shared and experienced online mediated through texts, images and sound or animation. Patrick Davison suggested a meme is "typically a joke, which gains influence through online transmission" (Davison, 2012, p. 122), while Limor Shifman gave the top line definition of memes being "cultural information that passes along from person to person" (2013a, p. 364). Davison openly acknowledged the difficulty in pinning the internet meme down in absolute terms, stating that no good definition had been provided at the time of his writing (2012 – a year before Shifman's 2013 *Memes in a digital world: Reconciling with a Conceptual Troublemaker* was published). Davison's concession was a familiar one, intimating as it did, that internet meme theorists were grappling with the quandary experienced by their memeticist forebears. Were internet memes ideas, or the artefacts that communicate them?

However, history was not to repeat itself, and unlike its theoretical forebear, internet meme theory did not become stymied. Instead (despite the slow uptake noted by Kate Miltner, 2014) internet meme scholarship was to thrive. As recalled in this thesis' introduction, academic interests were initially piqued the second half of the 1990s, when a handful of thinkers began to engage with these phenomena, with handfuls more following suit from the 2000s. Notably, the internalist-externalist dichotomy – or rather its threatened redux – was seemingly put to bed. For even when lesser known, or perhaps derided as trivium, internet memes could not be denied. These phenomena were manifest, for all who had access to the internet to see. And if they were to be thought of as artefacts, they were at least artefacts of the sort materialisable on the internet. And if they were conceived of as ideas, they were ideas that propagated online. There were, in other words, tangible, bounded, and observable emergent properties to internet memes; which meant internet memes could be meaningfully studied. So while Davison 2012 cautioned that *the meme* still lacked a proper definition, the *internet meme*, evidenced by its significances to online forms of sociality, was primed for mobilisation. And it was in respect to the internet meme's social imports that thinkers began to consider memes in respect to their "particular relevance for cultural analysis" (Shifman, 2013a, p. 364).

From 2000s and into the 2010s internet memes started to gain increased prominence within cultural imaginaries, as artefacts used in online interaction. As such, a tendency emerged in scholarship to consider them within the auspices of communications theories; as previously stated, declared "media lingua franca" by Ryan Milner (2013a), who like Shifman advocated their interpretation as discourse. And as digital artefacts that were issued contributions to discourse, this conceptualisation of internet memes made a lot of sense. Indeed, (as referenced in the introduction) much productive scholarly work on internet memes has been produced through the lens of discourse analyses and broader perspectives in communications theorem. Indeed, internet memes appeared as entirely suitable candidates for such treatments – emerging as they did as an observable subject, captured as digital records and associated context and metadata. Consequently, as digital artefacts however composed, a decent portion of the conceptual baggage that beleagured the first generation of memeticists was cleaved away. As observably communicative, internet memes could be parsed in terms of their vernacular formations, or function, as

ideas that spread across media forms, as elements of participatory cultures, as slang, or else as a novel form of expressive practice. And while scholarly papers on internet memes would frequently invoke Dawkins or the thinking of the 20th century memeticists in their *precis* in respect to coinage or general orientation, few attempts were made to substantively reconcile the internet meme with its antecedent. As such, there remained a largely unadressed gap, with internet meme scholars (for good reason) less inclined to need to define or reconile with the memeticist's meme when their *internet meme* was clearly doing significant things within online contexts which needed redress. In a form of truce, the troublesome meme laboured over by memeticists, though not disgregarded entirely, was less engaged with, lingering undefined, while *internet meme* scholars got on with the necessary task of interrogating their subject.

Perhaps the boldest move within the "vernacular" academic readings of internet memes, was Bradley Wiggins'. Writing in 2019, Wiggins proposed that the internet meme should be recognised outright as a discrete phenomenon. The internet meme, he argued, need no longer be dogged by the conceptual confusion introduced by the wider notion of the meme, which, for Wiggins, shared only semantically-drifted nomenclature. Not unreasonably regarding the broader notion of "the meme" to be a contested and ill-defined concept, Wiggins contended that it was justifiable and necessary to decouple "the internet meme" from its conceptually-effacing antecedent. Given that the internet meme, for Wiggins, manifestly exists as digital media artefacts that function in online discourses, the call here was to theorise internet memes are *visual arguments*. The internet meme, in this school of thought, would benefit from discrete analysis within semiotic and communication theorem.

While Wiggins was correct to sound the alarm about the risks of impasse that come with any attempts to reconcile the internet meme with the meme – given that neither phenomenon are conceptually settled – I contend that bifurcating the internet meme from the meme in the manner that Wiggins advocated misses an opportunity for productive analysis, and more, unintentionally clarifies what can actually be gained by not letting go of the broader notion of the meme entirely.

Before getting into the substance, it is worth noting that Wiggins introduces unnecessary conceptual weaknesses by discretising internet meme theory in such an uncompromising way. For one, an attempt to isolate and redefine the internet meme entirely as a form of "visual argument" places undue emphasis on the visual artefactual properties of internet memes, when internet memes can emerge and gain meaning in ways that are reliant on inferences rendered through gesture, tone, and temporality. The grammatisation of the technically afforded copy/paste gesture briefly discussed in the Chapter Three is indicative of this conceptual shortcoming – for while certainly an internet meme, copy/paste is only in crude terms a visual argument. At the same time, phenomena such as Faxlore can certainly be understood as a form of visual argument, but are most definitely not internet memes. Additionally, there is an intentionality ascribed to the characterisation of internet memes as arguments, whereas not all memes will proliferate in service of purposeful persuasion, or even within circumstances squarely recognised as discourse - as argued in Chapter Three, and reflected in Shifman's observation that the digital "media landscape is governed by a 'hyper-memetic logic' where 'almost every major public event sprouts a stream of memes'' (2013a, p. 413). Most problematically however, the bounding of internet memes as an exceptional phenomenon produces a circular argument - that an internet meme is, well, an internet meme. Given changes memes have gone through since they began to proliferate on the internet, the term internet meme itself seems already effaced, suggesting that the definition offered by Wiggins cannot be expected to hold.

Indeed, Wiggins' call to parcellate the internet meme as a discrete subject is some jump away from Thieme's description of internet memes *being memes that began to appear on the internet*. And while I concur that the internet meme does certainly possess distinct characteristics which require redress, I do not agree that this is best achieved by bifurcating them from the wider concept of the meme. For while separating off the internet meme as discursive may ratify the reduced scope implicitly adopted by many internet meme theorists, I suggest that the placing of a parameter around internet memes should instead by recognised a tactic to facilitate study, rather than a reframing of a subject. Indeed, as this thesis has sought to argue, I contend that memes, internet or otherwise, become materialised emergences replete with distinct characteristics as a consequence of the contingent technosocial context from which they are proliferated. This formulation absolutely accounts for any social function of the meme, such as visual argumentation, along with their broader cultural significances, to be recognised – with the imperative being to pay attention to how and why particular meme forms emerged, in order to better understand their effects. Indeed, I offer that the theoretical perspective furthered in this thesis can itself help to recover why the "vernacular turn" in meme theory became prominent, reaching its extremity in Wiggins' work.

Towards a Mediatic Turn

That is, I posit that the consolidation of the internet meme as a vernacular phenomenon is itself part of the internet memes' techno-social history, and more, that technics are implicated in specific ways in the emergence the vernacular internet meme.

It was after the "birth of social networks and their worldwide boom" that internet memes, as Gabriele Marino put it began to go global – as they "exploded outside of their native 'Internet geek' womb with the so-called Web 2.0', coinciding with the boom of social networks like Facebook and video sharing platforms" (2015, p. 46). This was a paradigm characterised by a move towards media ubiquity and in the context of internet predominance, the rise of the user: that is, the ebb of browser-based web technologies, and the increased adoption of frictionless platforms and apps designed to enable, and encourage, increased use. Within this context, particularly in relation to the emergency of social digital platforms – message boards such as 4Chan (founded 2003), reddit (founded 2005), 9gag (founded 2008) and social media sites such as Facebook (open to all over 13 years old from 2006), Twitter (2006), and Tumblr (2007) – internet memes were to consolidate as a significant part of a mediatized life. Accordingly, the use of memes in arbitering social relationships and community work – through their utility as vernacular – emerged as a pressing issue for the growing community of internet meme scholars. But significant too was the role these platforms had constitutive effects of the discourse that occurred. As noted by Goriunova, platform affordances have a bearing on the formal and functional properties of emergent internet memes; what Goriunova describes as the "architectonics" of a meme (2013, p. 70), that is "the way memes acquire certain form, a set of rules along which they are often produced... are largely an inheritance, a reflection of [platform] structure (2013, p. 71). Which is to say, that internet memes as artefacts were not simply exchanged agnostic of platform affordances, but instead platform affordances were constitutive of memetic exchange, having a bearing on the meme instances and corpuses that emerged, and the communicative significances they possessed.

At the time of Goriunova's writing, the infamous message board 4Chan was well-documented as having an outsized influence on the aesthetic and affective attributes of internet memes -a role for which it was dubbed the "meme factory" (Chen, 2012). Noting the influence of this platform and its communities of users, Goriunova made clear that that "the way memes acquire certain form, a set of rules along which they are often produced, rituals through and around which they work, and how they travel and entice and require people to enact them is largely an inheritance, a reflection of... platform structure" (2013, p. 71). That is, that the artefactual, materialised form the internet meme takes, and the way a meme is put to use, is co-constituted through the meme being proliferated through specific technical arrangements. The technics in use then, have a bearing both on the aesthetic and affective attributes within emergence memes, and, recalling Vilém Flusser, technically arrangements will too have a bearing on the distinct gestures "consciously or unconsciously agreed upon" (Flusser, 2000, p. 85) by the communities for whom meme proliferation serves a communicative function. Once more, the meme is revealed as ontologically distinct, comprised of individuated instances, which become recognised legible phenomena as they proliferate into corpuses – as Goriunova put it, "where such expression enters into and sustains a relationship to others..." (2013, p. 58). To call on Bernard Stiegler once more, as individuations, memes can be understood as exteriorisations (Stiegler, 1998). Anchoring her own perspective on this point through the work of Gilbert Simondon (supplied with thinking for Mikhail Bakhtin) Goriunova makes clear the

necessity recognising that it is by individuals engaging with a collective with and through technical conditions – that is techno-social milieus – that meme forms are brought forth. That internet memes are brought forth as digital artefacts replete with aesthetic and affective attributes is therefore a form of emergence contingent on techno-social gestures. That is, as a form of *vernacular* which functions as such in ways preconditioned and constituted by its technicity. Couched so, the internet meme's function as vernacular, visual argument or otherwise, must be understood not as a given, but as a contingent emergence.

A revealing example of this is the Image Macro meme type – typically comprised of an image overload by Impact Typeface that gained popularity on 4chan in the late 2000's (see Figure 21 for an example of this meme type). During 2010s, perhaps no format was quite as prevalent as the Image Macro, on 4Chan, and beyond. Indeed, such was the ubiquity of the Image Macro in the early 2010s (emerging as a recognisable template *aina* 2007) that for some the format may have been synonymous with the vernacular concept of the nascent internet meme (Miltner, 2018). And for all the bile 4Chan has distributed since its launch, and the seedy reputation it has accrued in doing so, a good number of its users from the mid-2000s (2006 to be precise) spent their Saturday mornings sharing images of... cats. Cat images formatted, it is crucial to say, using the Image Macro meme series template, forming a "sub series" known as LOLcats (see Figure 22 for an example of a LOLcat). This weekly event was known as Caturday.

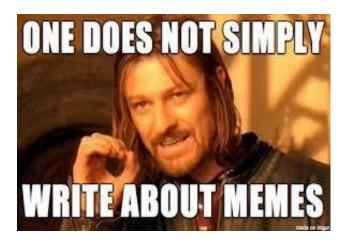


Figure 21. An example of Image Macro meme types, which retain the format convention inclusive of the Impact font, while incorporating different exploitable contents (images)/keying.

As a sub-series of the Image Macro, LOLcat memes typically included a message rendered in the Impact typeface, set against an ever-changing variety of cat images. These memes clearly evince Milner's morphological account of meme proliferation; with individual meme instances a "fixed" and "novel" element (a cat, a particular cat, the Impact typeface, the LOLspeak syntactical structure typical of these memes, reproduced and remixed by turns). Likewise, these memes evidence proliferation occurring along Shifman's dimensions of form content and stance – with new meme instances adding to the cast of cat characters included in the corpus, possessing new punchlines, being delivered ironically, or any other variation possible across and between these vectors. Specific contributions were individuated, while always retaining a relation to the wider corpus of meme instances, with each accretion making sense of both the instance and the wider meme of which it was a part.

In the context Caturday, there were some granular "rules" – *beaten tracks* – for creating a successful LOLcat (that is, a popular contribution); rules that, per Goriunova's observation, were arbitered through individuals engaging with a collective with and through technical conditions (2013). This effectively entailed anonymous 4Chan users who posted meme instances to the /b/ or random board in weekly social event, having their contributions implicitly rated by their peers. Successful LOLcats would be commented on (Brubaker, 2008), or in a gesture cultivated by the board structure on 4chan "bumped" to

the top of the thread (Goriunova, 2013). Devastatingly, "unsuccessful" memes, neither commented on nor bumped, rendered ephemeral as they fell to the bottom of the thread structure (see Bernstein et al., 2011, for an account of the practicalities and practice of "bumping").

This cute social activity – that is, the proliferation of LOLcat memes – was not to remain the preserve of 4Chan for long, with communities on other platforms soon partaking in either the creation or recirculation of cat-centric Image Macros, with the popular "Happy Cat" LOLcat (Figure 22) celebrated in a "single serving website" (i.e., a website with only one piece of content) by 2007, and soon after subject to early monetisation efforts by Ben Huh, who according to Kate Miltner was the "first person to create a sustainable business model" (2018, p. 423). Huh purchased ICanHasCheezburger.com in 2007 having pitched for venture capitalist funders for a US\$2 million investment, based on anticipated site traffic and advertising potential. As recounted by Miltner, this investment paid off, enabling Huh "to acquire a collection of meme-related websites, including FAIL, The Daily What, Memebase... [consolidating] the websites under the aegis of Cheezburger, a corporation that received US\$30 million in venture funding, made \$4 million in yearly revenue, and employed 75 people at its peak" (2018, p. 423). Huh was clearly on the money, with LOLcats enough of a cultural sensation to make an appearance in *Time* Magazine by June 2007 – a moment of transmedial amplification that would serve to further consolidate both the LOLcat series and the wider macro format in the public's imaginations, and see memes begin to enter the annuls of the academy.

As the 2010s progressed, LOLcats, along with other Image Macro series and meme types, spread across platforms – featuring on Facebook walls, collated and discussed in dedicated subreddits, shared on Twitter, and reblogged on Tumblr, as well as being harvested for engagement by metricised media sites like *Buzzfeed*. LOLcat Image Macros made tremendous visual arguments, conveying as they did, through line-broken strapline, a variant of LOLspeak, and an abundance of cat characters myriad meanings, as they were modified across vectors of content, form, and stance in service of a communicative end. LOLcats, along with the Image Macro, were in other words, proliferate. Moreover, using a LOLcat, was

itself a communicative gesture. Sharing one indicated that you knew that it was 2007 and cat memes were

in.



Figure 22. A popular, early LOLcat Image Macro meme, known as "Happy Cat"

Know Your Meme

In 2007, ICanHasCheezburger also bought meme cataloguing website knowyourmeme.com. This positioned Cheezburger a powerful entity, owning and available as it did a suite of tools for the internet users of the late 2000's and early 2010s – which, as noted by Goriunova, comprised enabled the swift and frictionless creation of meme instances (2013). A cottage industry started to emerge, with services such as meme-generator.com and imageflip.com taking away the pesky task of having to create a meme using a graphical editor, facilitated proliferation of internet meme proliferation. Similarly, photo-sharing services such as Flickr both cultivated the sharing of amateur images online, and served as a bank from which new "exploitables" could be sourced. In allowing users to create memes with relative ease through modifying or remixing popular meme templates without having to use editing tools such as Photoshop – or even

having to take their own photographs – meme creation was made a cinch. Meme generators catalogued recognisable meme formats - or "exploitables" (Figures 23 and 24) – such as a LOLcat template, and made these assets retrievable to users, who would also be provided with the tools to add their riff or remix, as well as the option to save or share the finished product with their peers on social networks, forums, websites, or blogs. knowyourmeme.com, meanwhile provided internet users with contextual background and shortcuts to navigating the sometimes complex "beaten paths" established by communities who had previously relied on "deep subcultural knowledge in order to both parse and participate" in meme vernaculars (Miltner, 2018, p. 423).



Figure 23. A blank "exploitable" template for the Advice Dog Image Macro meme, taken from the makeameme.org meme generator

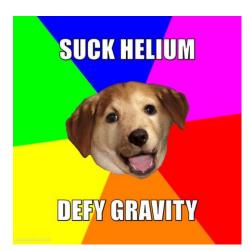


Figure 24. A populated exploitable template for the Advice Dog meme, taken from the makeameme.org meme generator

Meme generators then, facilitated the ease by which internet memes could be proliferated, and existed in dialectical relation to the vernacular internet meme taxonomies being established within sites like knowyourmeme.com. The emergence of what Gabriele Marino called folk taxonomies (2015) faithfully documented and catalogued by knowyourmeme.com was itself meaning-making: communicating through practice that memes were of enough import to be worthy of taxonomy; supplied with nomenclature and catalogue notes speaking to the *polysemic* (Highfield, 2016) complexity that memes both possessed, and were stipulated as possessing, within online communicative practices. More, the sorting and cataloguing of internet meme templates into named taxonomies - such as the Image Macro meme and its LOLcat sub-variant - was indicative of meme forms being overtly recognised as memes, and codified into named, categorised, and catalogued elements of a lexicon. Indeed, taxonimised as such and used within online discourses to communicate a message, internet memes can did indeed emerge as a media lingua franca. And more, that they could be catalogued as participatory, and thereafter open-access folk taxonomies. These catalogues, which repeated the language "rules", committed were performing knowledge work. In doing so, they committed to collective memory the lexical keys - themselves established through individuated meme instances forming a corpus - through which once hermetic internet memes could be parsed; a dynamic which itself was constituted by technics of the internet as used in social practices preconditioning it, by proliferating internet memes exteriorised as gramme, and rasterised into vernacular.

Not all *netizens* appreciated this kind of knowledge work. Elements of the 4Chan userbase for instance, regarded the availability of meme generators as the co-option and "normification" of internet memes, which had previously held significances to their community groups. That these significances were coded within the memes they created and shared as a result of the architectures of the platforms across which these communities socialised were flattened into an exploitable and re-shared in a fully decontextualised manner obliterated the hermetic significances that the originary communities held dear, "contributing to the destruction of the meme-creating subculture that he had helped establish" (Miltner, 2018, p. 423). Indeed, for some, the explosion in popularity of these memes was deemed a disaster: Andy Baio, declaring 2012 to be the year that memes died, suggested that memes lose their social significance to communities when shared at a scale afforded by the mass use of social networks (Jackson, 2017).

Baio's lamentation of course spoke to the evolution of the internet meme as it related to the community to which he was a part. But the meme is bound to proliferate, and under the auspices of an increasingly privatised internet (2.0) perhaps inevitably monetised and exploited, as disconcerting as that may be for those who sense their vernacular being reconfigured. Conversely, with some hindsight a more philosophical observation might be that the consolidation of internet memes into the recognisable form of vernacular that Baio was privy to could only ever be a highly contingent, and temporary arrangement; reflective of the techno-social practices which brought them forth. Indeed, that the internet meme *did not* die in 2012, but instead proliferated and emerged in new, remixed, or reconfigured forms – which themselves were destined to go through the same loops of recursion – is a quality of internet memes preconditioned by the techno-social conditions of emergence; as *gramme*, then vernacular, oriented towards proliferation.

Within that context, it should also be recognised the internet memes subject to academic attention in the late 2000s and throughout the 2010s – brought forth as discretised artefacts, such as Image Macros, and concomitantly taxonimised and asserted as vernacular, and through their study stipulated and explicated

memes as digital artefacts that functioned as vernacular – were too contingent emergences from a technosocial historical moment. Which implies that while apprehending these memes as vernacular was in not a mistake, but also, perhaps not the whole story.

Once more, Bernard Stiegler's notion of grammatisation (2010) frames this dynamic, for the consolidation of memes into vernacular should be properly understood as preconditioned by the capacity of internet technics to realise internet meme as digital artefacts replete with communicative forms and functions. Of course, internet memes are not *gramme* simply because they function as vernacular. Rather, they are *gramme* as materialised emergences produced through the techno-social arrays productive of mnemotechnics – artefacts that possess utility in respect to their aesthetic and affective attributes, and rendered into artefacts imbued with understood (or less so) shared meanings, captured as digital records, sorted into taxonomies, and oriented towards ongoing and recursive lexical utility. Couched so, the conceptualisation of internet memes as phenomena that emerge *as* vernacular seems too reductive, eliding as it does the complex techno-social negotiations undertaken in order for memes to be recognised and used within vernacular communications and the preconditions necessary for any such negotiations to take place at all.

Indeed, as demonstrated by the legacy of Caturday, when individuals within certain techno-social contexts proliferate internet memes – using digital platforms and tools – they are producing *gramme* that become co-constitutive of wider cultural memories as tertiary retentions (Stiegler, 1998). So, while individuations issued in service of a communicative exchange, internet memes can be considered technical *exteriorisations* that find expression in ways made available through the use of platforms and online tools such as meme generators, these individual contributions, in isolation or as a corpus may persist within the cultural milieu. Thus, in emerging within techno-social conditions where proliferation had a strong social function, and where the *gramme* produced was readily diffused into cultural memory, it should be seen as is inevitable that situational meanings, such as those lamented by Baio, will be lost. The acquisition and iteration of particularised meanings within meme corpuses, is, after all, the very same quality that

mobilises them as vernacular. More pertinent perhaps then, internet memes – as gramme, as persistent exteriorisations, as catalogued vernacular – must be expected to endure recursive loops of proliferation, with the emergence of new meme formats, and functions, both encoded by and a reconfiguration of the continuous flux of techno-sociality. Once more, when addressed as *cuts*, beyond being salient to any specific form of expression, internet memes disclose their techno-social conditions of emergence.

Couched so, Baio's upset at the loss of localised meaning can, by the same turn, serve as an insight into the co-constituting effects the proliferation of memes can bring to bear. That the emergence of recognisable meme forms, which are individual *exteriorisations* from a community group which aggregate into a recognisable meme, can function explicitly as vernacular is a phenomenon realised internet technics. And that corpuses of internet memes are further ratified and entrenched by aggregators and generators, is to indicative of how internet technics produce "long-term processes of transformation from spectacular but fleeting technical innovations" (Stiegler, 1998, p. 21). This is particularly significant in respect to how internet memes, as *gramme*, are rendered observable as digital artefacts, and thereafter persisting as readily replicable digital records. As such, the ongoing proliferation of internet memes must be understood to be both rooted in moments of technical (and social) innovation while being recursively reconfigured in respect to the iteration of the (always iterating) techno-social relationship which continues to be the precondition for ongoing emergences. Both as (perhaps unseen) techno-social histories, and in being constative in the moment of novel proliferation, the technical and the social as they contingently interrelate have a bearing on the emergence of memes and their location and significance to cultural memories.

And if recounting the techno-social emergence of the LOLcat between 4Chan, "normies", and meme generators sheds light on how platform technics are constative in the grammatisation of this meme form, then the same line of thinking also suggests that we can further recover contingent moments in a technosocial history that brought such a vernacular into being. Once more, I propose that apprehending the internet meme as *a cut* provides a means by which the technics, or rather, the significance of technics in the meme's emergence can be evinced. Already, attending to the LOLcat meme has revealed some aspects of this memes' contingent techno-social conditions of emergence, particularly in respect to the platforms used in their emergence and consolidation. However, I posit that as *a cut*, the Image Macro meme type has even more to disclose.

Through The Looking Glass Image Macro

A belated but important caveat: While discourse analysis emerged as a dominant framing in respect to the internet meme scholarship in the 2010s, in addition to Goriunova, there were of course thinkers who addressed and accounted for the technicity of memes when developing their theoretical perspectives. A good number of these scholars were published in a special issue of the Journal of Visual Culture playfully titled "One does not simply" (Nooney, 2014). This issue contained a number of important contributions, including three articles that seriously considered the role of technical media in creating not just the form and content of memes, but the sensibilities brought forth by the relationship between technical and social forces. Nick Douglas's consideration of internet ugly (2014) interrogated the digital aesthetic properties of internet memes by taking into account the technical qualities that realised and then codified such a sensibility. Similarly, Jason Eppink's media history of the GIF format (2014) looked towards computer histories to contextualise the emergence of the GIF format in techno-social terms (a piece of work I will return to later in this chapter) Also included in this volume was Kate Brideau and Charles Berret's history of the Impact typeface. In it, Brideau expounded the set of mundane and pragmatic business decisions that served as preconditions for the emergence of Impact as the "meme font" (Brideau, 2014) - a trajectory that speaks once more to the codification and creation of a gramme in ways entirely bound up in the interplay between the technical and the social.

Such interplays necessarily have some history. 4Chan might have been known as the meme factory, celebrated and hated in turn. But the term "Image Macro" was coined in the forum Something Awful in the 1990s (Miller, 2012; Gault, 2021) to describe an image-based media artefact shared via a softwareenabled gesture. Images were already a stalwart on compatible forums, while the concept of a "macro" may well have been familiar to tech-savvy web users: rooted as it was in computer science, describing "a rule or pattern that specifies how a certain input sequence should be mapped to an output sequence according to a defined procedure" (Anon, 2020). It had become commonplace for Something Awful users to react in threads via images that proxied expressions, and (earlier) in 1999 this tendency was (literally) codified by forum moderator Richard Kyanka. Under his forum handle "Lowtax", Kyanka enabled a VB code that would automatically post an "image macro"" (Lowtax, 1999) to the forum on user command. This meant users could enter a keyboard shortcut that would be parsed by forum software in order to surface a pre-defined image, allowing them to quickly share expressive media files that could proxy longform speech. Yet, while the gesture of easily calling up a reaction image is recognisable, the Image Macro meme template really began to take shape when text was applied, specifically in the Impact typeface.

As detailed by Brideau, Impact was designed by Geoff Lee in 1965 in metal, having been intended for use in print. First sold to the Stephenson Blake foundry in 1965 as metal type usage waned, the font was later digitised and sold on to Monotype for use in phototypesetting processes. The typeface was named well: valued for its readability and retaining its legibility even when placed alongside complex graphic images "designed to attract attention through the sheer power of its weight" (Brideau & Berret, 2014). Gaining only moderate popularity in print, according to Brideau, there was nothing to indicate it would acquire a significant place in global psyches. Rather, Impact's rise to prominence came about in a somewhat more mundane manner – as the result of business rights transfers and licencing arrangements. The Monotype foundry licences the digitised font to Microsoft, who included Impact as part of a package of fonts used with Windows in the 1980s and '90s. By the mid-1990s, Windows was the most used operating system worldwide, which meant that Impact was one of the most available typefaces. Subsequently, Impact was included in the World Wide Web Consortium's (WC3) "core fonts for the web", alongside other fonts from the Windows wheelhouse, Times New Roman, Courier, Georgia and Verdana (Brideau, 2014), meaning that Impact surfaced to a global network of users as a consequence of its availability.

Yet, what is described in the paragraphs above amounts to another set preconditions which for the Image Macro's emergence. An intervention by a forum moderator precipitated the coding of a vernacular convention contoured by the social dynamics and forms of speech acts afforded by forums and their users. Resonant of the unforeseen significance of Copyleft explored in Chapter Two, a licencing arrangement was a precondition to a typeface being incorporated as a core web freely available on operating systems, within programs such as Word as well as image editing software such as Microsoft Paint and Photoshop: tools that would have been used to make media files to be shared in forums. Recounting these stories implies a degree of arbitrariness: how licensing agreements of the 1960s and forum mores of the 1990s played a role in shaping the vernacular conventions cultivated by iterating web communicates decades later.

More to the point perhaps, is how the emergence and *grammatisation* of the Image Macro, forged in forums and 4Chan, celebrated through Caturday, squabbled over as it goes stale, was committed to tertiary memory *at all* as a recognisable meme type as a consequence of contingent moments. Which is to say that the aesthetic and affective attributes that this internet meme – as an indicative example of other "meme types" – comes to wield are not arbitrary, and instead have become *grammatised* as a result of their techno-social co-constitution. That is, that the ways in which proliferation – a gesture contingent on technical mediation – is afforded is itself constitutive to the bringing forth of any one meme instance, and with it, any consolidating meme emergence apprehended *as* a meme. Thus, while couching internet memes as images, text, sound that function as vernacular – or as visual arguments – they must be understood to be so in ways co-constituted by technics, as used in social contexts. From the ways in which these technics afford proliferation – with the reproduction and remix of memes being their distinguishing quality as communicative phenomena becomes constitutive to how and why internet memes yoke and yield discursive power, technics are always implicated. Thus, that meme generators and

attending taxonomies have codified discrete artefactual formats into an online vernacular is less an argument for memes to be understood as a lexicon comprised of iterating image, text, videos, and sounds, and more an instance of internet memes emerging as Image Macros a certain moment in their history.

What this historical commentary suggests therefore, is not only that internet memes emerged as a form of vernacular, but that they emerged as a vernacular co-constituted by the ongoing interrelationship between the technical and the social. And while created in fleeting moments, through their digitality may persist and become constitutive subsequent cultural milieu and memory is a novel consequence of their technosocial make-up. This observation also makes clear that paying renewed attention to the technics in use in the proliferation of internet memes then, is not to lose the "human" in this equation. As Alice Marwick asserted, memes must be understood as subject to human innovation, creation, and responses (2013). Rather, this framing is intended to account for how the creative, social use of iterating technics, in contingent, more or less obvious ways, produced memes, and the retention of memes makes it important to understand their history, how they shape the cultural memory, and moreover remind us that mediation and technical arrangements are always in a medial flow. Once more, memes – internet or otherwise – are always techno-socially constituted, both as recovering their histories will reveal.

A GIF for the Ages

A different, but equally contingent techno-social history can be recovered when the equally popular meme form of the GIF is attended to. Still popular at the time of writing – despite a 2022 article decrying the outdatedness of the reaction GIF meme (Tait, 2022) – the GIF-as-file-format type predated the GIFas-meme. But this is no arbitrary supplantation – for the history of the GIF as file format in inherent to the emergence of the reaction GIF meme. Once more recalling Flusser's postulation differing media arrays will in turn develop distinct gestures "consciously or unconsciously agreed upon" (Flusser, 2000, p. 85), which, after Goriunova will realise meme forms that have inherited aesthetic and affective attributes as a consequence of platform affordances, a techno-social history of the proliferation of GIF expounds how it is the techno-socially realised grammatisation of this meme form that underwrites its vernacular significance and thereafter, its prominence in cultural experiences and memories.

The GIF: file type, format, meme, has remained highly recognisable within online spaces for decades, with its popularity testament to its communicative prowess. Productively studied by Highfield (2016), Miltner and Highfield (2017), and Tolins (2016), as well as by thinkers who furthered a performanceinformed, participatory readings of GIFs to align them with perspectives on user-generated, or usercirculated content, as theorised by Jean Burgess (2007) and Henry Jenkins (2012), among others. Indeed, the animated GIF in particular "represents a novel form of embodied re-enactment made possible within the technological advances of the communicative system" (Tolins, 2016, p. 77). Used to proxy enacted emotions (e.g., surprise) and affect (e.g., affection), the GIF's expressivity has ensured its centrality in web discourses. For Miltner and Highfield, the enduring popularity of the GIF came "thanks to a combination of their features, constraints, and affordances" (2017, p. 2). These combined with their "endless, looping repetition, allows them to relay multiple levels of meaning", making them "an ideal tool for enhancing two core aspects of digital communication: the performance of affect and the demonstration of cultural knowledge" (Tolins, 2016, p. 4) - as indicated in Figure 25 below. A valuable contribution to such perspectives has been furthered by Laur Jackson, who critiqued ways that the proliferation of the animated GIF in particular can be reflective of racism, misogyny, and coded biases (see Jackson's 2014 essay Memes and Misogynoir for a standout piece on this dynamic).

The GIF, in more recent years, has been understood as a meme type rather than a file format – oftentimes in the context of reaction GIFs. Once again, as a case study, GIF memes lend credence to Shifman's assessment of the complex manner by which a meme can spread insofar as the GIF demonstrably proliferates along the dimensions of content, form, and stance. And through proliferation, GIF meme instances are both recognised as memes as they relate to a corpus, with a corpus in turn being bolstered by the accreting number of individuated instances with are added to it. And like the Image

Macro, the highly expressive GIF meme has too been taxonimised, aggregated and included in generator sites, which in turn perpetuates recursive reconfigurations. Once more, as a *gramme*, the GIF meme should be recognised as co-constituted by and a cut into the techno-social conditions of emergence which has seen it brought forth.



Figure 25. Stills from the "Blinking White Guy" reaction GIF, popularised in 2017, and used to express surprise. The remix of the original GIF as a storyboard-type exploitable is, incidentally, a mean by which the meme can be remixed

Thus, in respect to my claim that the social effects of proliferation are co-constituted by technics, and that these complex, situated meanings are communicated through the simple, literally recursive, looping of source material – whether comprising visual or textual material or both – these can be parsed as a phenomenon that has been entirely contoured as the techno-conditions of the internet has developed. Indeed, GIFs are deeply imbricated within web histories. Retaining a strong association with the early web of the 1990s, while also linked to the emergence of a more platform-centric Web 2.0 alike, little about the GIF format itself has changed since its inauguration in the 1980s. As such, it is an ideal candidate through which the co-constituting dynamics of media and mediation can be expounded, for its emergence as a meme has been an entirely contingent trajectory. To briefly recount the media history of the GIF: the format was created in 1987 by CompuServe's Steve Wilhite. The GIF – or Graphics Interchange Format – is a Bitmap image file. It supports up to eight bits per pixel allowed in an image to

reference 256 web-safe colours, and in so being produces small, lossless image files. This was the desired effect of course; it was a digital a product designed for use in the context of the early, bandwidth-constrained web. (See Jonathan Sterne (2013) for a parallel account of the creation and consolidation of MP3 files at a similar juncture, and a persuasive argument for the importance of "format theory" as an aperture through which relations between technologies, economics and cultures of everyday practice can be better understood.) This is to say that the constitution of the GIF a media file was therefore reflective of, and relationally determined by, the media arrays it was designed to be used in.

And the use case for the GIF was social: early users of the web wanted to share images via e-mail and bulletin board systems, which would require the existence of a file type with a polite/socially acceptable low size that would not totally forgo fidelity. So, though GIFs used in memetic exchanges have been attributed with communicative prowess due to their animated, meaning-making, expressive looping, the GIFs in use in the 1980s and up until the mid-90s were experienced as static images. Their iteration into animation took place over several years, starting with the development of GIF89a in 1989. GIF98a was the first GIF variant that would theoretically support animation. It incorporated the Lempel-Ziv-Welch (LZW) algorithm: a lossless compression technique created in 1984 (by Abraham Lempel and Jacob Ziv, and published by Terry Welch) that sequenced 8-bit data as fixed-length 12-bit codes. By relying on reoccurring patterns, GIF89a could produce an amination using minimal data, through image looping. In theory, LZW enabled GIFs to resolve as simple animations, comprising single images of low file size running together in a data efficient way, creating a moving image effect in the manner of a flipbook; indeed, embedded within this technique is a longer media history of flip books and zoetropes (Zupanic, 2013; Eppink, 2014). Further, the specification for GIF89a enabled transparency, which by allowing the file to exist in multiple locations - header, banner, text field - on multiple web page types, ensured that this format compatible with multiple user needs. (as catalogued in the Library of Congress' Format Description entry, available https://www.loc.gov/, accessed October 2021)

Indeed, for Olia Lialina, the availability of transparency was of the utmost importance, as it ensured that distribution, use, and therefore proliferation could take place (Lialina, 2019a). But, in 1989, this potential was all theoretical. This was because distribution, use, and proliferation of the expressive animated GIF was contingent on a distribution means – namely compatible browsers. And, in 1989, no compatible browsers were available. By the early 1990s then, GIFs were rendered as still images – reactions in forums, attached to emails, and included on web pages. Aptly enough, the first image uploaded to the web was a GIF: an image of a concert flyer saved and scanned into Photoshop by Tim Berners-Lee at Cern in 1992, saved as a static GIF, and uploaded to a music server. (See Figure 26) (Cartwright, 2015).



Figure 26. Poster for Les Horribles Cernettes, an all-female comedy band comprising Cern employees

It was not until 1995 that a distribution means for the animated GIF arrived. This came along in the form of the Netscape Navigator browser – the first browser that was compliant with the GIF89a format. Netscape's release can be considered an inflection point where the undergirding computational logics of the GIF as file format, its suitability for use in context, its expressivity, and the arrival of a mechanism for proliferation acted as forces that were conducive for the GIF's embeddedness within web cultures. The animated GIF was born, and the late 1990s saw Web 1.0 becoming adorned with flaming fonts, glitter graphics, dancing babies, rotating smileys, and the ubiquitous "under construction" signs – all of which contributed to an aesthetic now regarded with some nostalgia (Miltner, 2017) and elsewhere described as digital folk art (Johnson, 2011). Of course, such an inflection point was part of a wider constellation. The animated GIF's arrival did not come together

outside, for instance, the development of HTTP protocols in 1989, which underwrote the emergence of Web 1.0. from 1993 and the modality of sociality that development afforded. Likewise, the technical systems developed to mediate web-based communities – email, BBS, Usenet, GeoCities, and Angelfire – provided users with means of interaction that included the sharing of GIFs as part of the social mores and community sensibilities afforded by email, blogging, and forum chat. This included the cultivation of running jokes, flaming, or the orientation of language styles to best suit the platform affordances in place. Within this, the GIF in other words, emerged as both a format and a meme, in a way entirely contingent on technical and social iteration.

Perhaps this contingency is well emphasised in the negative – a moment in the story of the GIF when the contingent conditions for its establishment were disrupted, not by changing trends or a superseding format, but through licensing arrangements. The LZW algorithm had been patented in 1985 by Unisys (Warbrick, 2001), a company that had threatened, but not comprehensively enforced, its rights to levy the LZW algorithm. As the GIF gained popularity and as usage soared, concern grew among web users that Unisys' position was to change – and when, by 1995, Unisys started to collect royalties, a user revolt was afoot.²⁹ The move by Unisys to profit from web vernacular angered early adopters of the web, who held on to the share-alike/Copyleft mentality. Indeed, such was the bad feeling that some users were inspired to hold an ironic, but genuinely rueful Burn All Gifs Day (November 5, 1999), during which GIFs were symbolically deleted from hard drives and servers. More practically, the proprietorial antics of Unisys dampened the GIF's popularity towards the latter part of the 1990s, and inspired the development of the alternative PNG format – Portable Network Graphic, or proverbially, the *PNG is Nat a GIF* format.

However, the waning popularity of GIFs was only temporary. For while the PNG proved a suitable alternative for still images, it could not rival the GIF for the delivery of short animations. And when the

²⁹ NB: According to a 1999 Slashdot article (Roblimo, 1999), Unisys was not blanker proposing to levy charges against users who included *GIFs on their websites*. Rather, unlicenced users who created GIFs that were freeware reliant on LZW compression could be deemed to be violating the patent – a threat that dampened GIF creation both in terms of it being punitive, and contra to prevalent sensibilities.

patent on the LZW algorithm expired in 2004, any dent to the GIF's popularity was restored. Moreover, by the 2000s, the GIF had begun to be assessed in terms of its cultural relevance, having been canonised within net art discourses, with Lialina locating the format as a medium for artistic expression (Eppink, 2014), while institutions such as the Whitney and Rhizome began to collect and exhibit GIFs from the mid-2000s. This means that, by the 2000s, the GIF was recursively coded with cultural significance – the practice of making and sharing a GIF had layered, technically and socially imbued significance.

Moreover, the GIF file format - like the Image Macro - was consolidated as a meme in dialectical relation to digital tools and resources made available to allow internet users to create and remix instances with relative ease. GIF generators, such as PimpMyProfile.com and GIF aggregator sites such as Gfycat, Gifer.com – and GIPHY.com (hereby styled as GIPHY) which I'll discuss in a little more detail in due course - emerged in step with GIF-use in the 2010s. These platforms obviated the need for would-be GIF creators to make their file in Photoshop or other editing software, and thus facilitated the ease by which GIF could be created and shared, and further consolidated extant GIF formats in doing so. GIFs received a further boost when smartphones and mobile browsers came to market from 2005 onward, requiring lightweight web design and image handling, the GIF was once again an ideal asset to utilise and ascribe with meaning. The ease by which GIFs could proliferate was further increased as the decade progressed, as video sharing sites were themselves contingent the improved processing power of PCs and broadband availability, including export and saveout features. Users could create GIFs that captured scenes from their favourite TV shows and films (and indeed, became particularly important in fandoms for that reason (Hedrick, 2018). For Lialina (2019b), the 2000s saw a new category of GIF take prominence: the looped sequences made from video captures of movies or TV shows. The reaction GIF meme was born. This was the grammatisation of a complex gesture – the explicit proliferation of a meme as a proxy for human emotion.

Used extensively within influential social platforms launched during that period such as Reddit, Twitter, and Tumblr (as mentioned launched in 2005, 2006, and 2007 respectively) the communicative utility of

the GIF as identified by scholars was ratified in the 2000s, but also further contoured. On Tumblr perhaps the platform to which GIFs have the strongest association, once claiming to have "invented reaction GIFs" (McHugh, 2015) - GIFs could be uploaded in sets of up to 10, known as gifsets. These sets were frequently elaborate, used to tell stories, champion fandoms, crack jokes, or ruminate on news and current events. By 2010 Tumblr had 34.2m users, and it decided to make a change to its platform functionality, by removing the one-megabyte limitation that had been imposed on GIF uploads since it launched, and doubling the allowance to 2MB. This change had impacts that extended beyond improving user experience. Prior to this uplift, Tumblr had imparted aesthetic properties on the GIFs uploaded to the platform by virtue of its size constraint – the smaller file size stripped out more high contrast colours, lending Tumblr-distributed GIFs a slightly muted tone. Given that the GIFs created on Tumblr, would thanks to their transparency – easily proliferate to other platforms, such as Reddit (particularly subreddits such as r/highqualitygifs), saw an arbitrary platform affordance have a long-term impact on the aesthetic language of GIFs – once more recalling Goriunova observation that platform affordance have a bearing on the aesthetic and affective attributes internet memes are ascribed with. Once more then, within these memes, consolidated as gramme, is a techno-social history. More, this gramme when committed as tertiary retentions, has a recursive reconfiguring effect. Consider Tumblr's reblog feature - a precursor to Twitter's retweet function. This piece of interaction design, created to facilitate the easy sharing of user generated or curated content de facto habituated the sharing of a reaction GIF as a codified gesture. That is, a technical feature rolled out by a (then powerful) platform grammatised the already-established social mores of sharing a reaction GIF. In affording the reblog, Tumblr imbued added significances to an established techno-social gesture by virtue of enabling it within the specific techno-social milieu of Tumblr.

Tumble's GIF *grammatisation*, was too reconfigured in turn. The importance of the compound gesture effected through sharing reaction GIFs can be gleaned by observing changes pointedly made to platforms in order to support animated GIFs. 2015 saw Tumble release a "GIF search" feature, while Facebook (finally) allowed users to post GIFs. This came a year after Twitter started supporting the format – sort of: Twitter actually renders uploaded GIFs as MP4s. This simulacrum is indicative of a widespread

recognition of the affective, aesthetic dynamic of the animated GIFs – the MP\$s needed only to look like a GIF to communicate as one. Likewise, well known animated GIFs could be reproduced as still single images, or as storyboards, in a nod to their original format. Such was the degree of fetishisation that the GIF needed to be simulated. As Eppink observed in 2017, GIFs had become "the destination" (quoted in Boissoneault, 2017). Moreover, the communicative act of reacting with a GIF – the reblog, the not-quite-GIFs, the codification of a gestures, and thus the act of sharing a meme format – that is GIF memes themselves, must be understood to have emerged and become codified – *grammatised* – in ways contingent on, and reflective of, its techno-social history. Indeed, this brief history of the GIF as meme type is indicative of how memes of any ilk are co-constituted by technical and social forces. This means the meme and the GIF – like the Image Macro and other meme examples that could be unpacked and historicised in such a manner – are the result medial contingency, and thus unthinkable without media. In respect to the formulations developed in this chapter, the case studies above speak to the ways in which an internet meme, such as the GIF or the Macro, cannot be thought of outside the mediating arrays that comprise the internet; that which makes them perceivable and legible is contoured by media, as it is the manner in which they proliferate, which itself imbues further communicative significance.

Conclusion

In this chapter, I have revisited the emergence of the "vernacular turn" in internet meme theory, and have suggested that the consolidation of proliferate internet memes into a recognisable vernacular, and their subsequent analysis of such, is itself a consequence of their technicity. To question such perspectives, in this chapter I have instead proposed that the mediality of the internet meme – that it, the techno-social conditions of its emergence – itself has resulted in the vernacular turn in internet meme thinking. In so doing, I have suggested that the utility of internet memes as communicative artefacts – *folksonomised* into vernacular lexica by communities –was itself preconditioned by constituting internet technics. As such, the emergence of the "vernacular turn" in internet meme scholarship, which has seen thinkers theorise internet memes (for good reason) within the scope of discourse analysis, should also properly be

considered as predicated on the constituting presence of internet technics. And while internet meme's utility of vernacular has not been questioned in this chapter, accounting for the proliferating ontology and thus technicity of the internet meme does trouble academic account that have attempted to define an internet meme as a coherent and stable category of phenomenon, rather than an inherently variable and contingent materialised emergence.

To assert this, I have argued that the *grammatisation* of internet memes and the commitment to tertiary memory as digital artefacts has proven instrumental in their adoption as vernacular. In particular, the proliferation of memes via internet technics has resulted in the materialised forms of *gramme* produced persisting and shaping the cultural milieu in ways made distinct though the digitality of internet mediation, which is readily reproducible, remixable, and retainable – and moreover renders the ontology of a proliferating meme observable.

As memes proliferate on the internet, the technical and social interplays – such as the creation of social mores on digital platforms such as 4Chan and Tumblr which were arbitered by the proliferation of memes, and the subsequent inauguration of meme generator sites which made the ongoing and decontextualised proliferation of meme instances possible – have continued to inform and iterate the ways in which internet memes emerge, and the social utilities they realise. That internet technics afforded the internet memes to be taxonimised via sites like Know Your Meme itself served to entrance both vernacular conventions and habituate internet memes as the 21st century's *media lingua franca*.

In light of this perspective, I have also suggested that a deeper excavation of a techno-social history of internet memes can be recovered to take into account for some of the contingent moments that brought any given meme form forth into a vernacular; and in doing so, to make clear that the lifeworld-shaping vernacular used in myriad online contexts, to myriad effects, is made available to us a result of a genealogy

of interventions and interplays between the technical arrays and the social context in which technics were imbricated and utilised.

To give a flavour of what this recovery reveals, I provided a techno-social history of the Image Macro and the GIF meme. Recounting the technical and social histories of these meme types expounds how iterating technical conditions acting in relation to evolving modes of mediated sociality have produced meme formats, series, types, and instances in contingent manners. In the Image Macro, we saw how interactions cultivated on and afforded by the Something Awful forum, entwined over time with the licensing of a typeface, played significant if lesser-recognised roles in the consolidation of this this meme type. In the GIF, we saw how technical constraints produced a format animated via a browser release, which went on to accumulate recursive significance as it swept to popularity across platforms that afforded affective expression though animated imagery. My aim here has been to draw on two strategic examples and to indicate the depth of history they speak to – and therefore by implication infer that there are constellations of complexity historic and less so that shape the experience of living a mediatized life, characterised by the ongoing interplays between the technical and the social. There is certainly more to say in this respect, with analyses benefiting from a more formal ethnographic account, which falls beyond this work's scope (Jackson, 2014; Coleman, 2014).

None of the case studies included are meant to be definitive – rather they are indicative of the inherent complexity from which internet memes emerge. Indeed, if my claim that the only constant identifying characteristic that makes memes distinct is proliferation is to be accepted, then the iterating techno-social are always contingent factors in the emergence of meme types. Within the techno-social history of the internet meme alone, punctured as it is by events major and minor, huge variety of meme forms have emerge, for complex reasons and with differing effects.

These ideas will be further explored in Chapter Five, in which I will consider how these contingent techno-social interplays and the memes brought forth have both realised and become reconfigured within a recent paradigm that is, I argue, characterised by media ubiquity and financialisaton. For now, however, I note this the trajectory, and include it in the ongoing story of the GIF, which like the Image Macro, is both indicative of the ongoing contingency between the emergence and significance of memes and the techno-social context from which they emerge.

Chapter Five: Money Printer Go BRRR

Step 4: Profit!!!

Throughout this thesis, I have conceptualised memes, internet or otherwise, as phenomena that proliferate, and that become recognisable as memes *because* they proliferate. As such, memes have a distinct ontological configuration – being comprised of multiple individuated instances created in awareness of each other that coalesce into legible corpuses. Couched so, the meme instances and corpuses must be recognised as having materialised in ways contingent on their techno-social conditions of emergence. As argued in Chapters Three and Four, in proliferating in ways made distinct through their contingency on internet technics, internet memes have been able to realise a vernacular utility. Moreover, I have argued that internet memes became stipulated and studied as vernacular as a consequence of their materialisation of and through techno-social conditions of emergence in which internet technics were a constitutive part.

The case studies mobilised throughout this thesis have been developed to both drive this argument forward while concurrently serving as "cuts" or analytic tools in their own right via which their conditions of emergence can be parsed. As argued in Chapter Four, technics should be properly understood as constitutive to the aesthetic and affective attributes memes (internet or otherwise) possess, which in turn, posits that the ways in which internet memes become apprehensible reveals things about the *bewildering array* (Terranova, 2004) of technical and social interplay that constitutes their conditions of emergence. Contemplating memes in this manner serves as a means via which the (perhaps understudied) role technics play in the emergence of memes on the internet, while explicating the specific ways in which internet technics imbue them with affective and aesthetic qualities and cultural significances.

In this final chapter, internet memes are considered as emergences from, and apertures into the technosocial conditions present in the US, from the mid-to-late 2010s. This period – particularly in the wake of the 2016 U.S. presidential election – saw internet memes very obviously, and perhaps infamously, *proliferate.* As noted in the thesis' introduction, the proliferation of internet memes across and between discourses attracted increasing amounts of academic and journalistic attention as the decade drew to a close, with the utility that internet memes had as vernacular – and for some, as "weaponised" vernacular – became a particular point of scholarly and journalistic focus. This thesis acknowledges that urgent readings of internet memes in response to their seeming "weaponisation" at this period of time, especially in regards their contributions to epistemic breakdowns, were entirely necessary. However, I also seek to place consideration of technics into the analyses of internet memes and their effects of discourses and wider cultural imaginaries.

To this end, it is salient to note that the technical arrays comprising the mid-to-late 2010s internet had become increasingly privatised. For, within the premise proposed, the internet meme instances and corpuses that proliferate from an array of financialised technics must too be considered as being subject to financialisation. In line with this thesis' contention, internet technics are not merely vehicles for the proliferation of internet memes, but are instead co-constitutive to their materialisation both in aesthetic and affective sensibility, and thereafter their cultural significances. Therefore, identifying the conditions of emergence from which a meme form proliferates as financialised suggests that the financialisation of technics will have some bearing on the form and functions such memes demonstrate – and the consequences thereof. More critically yet, in proliferating across and from financialised techno-social conditions for which revenue and capital is accrued from the use the technics – that is, from the proliferation of internet memes – internet memes themselves may be rendered into commodity forms.

To explore this concern, in what follows I will first describe and historicise the emergence of financialised media ubiquity – that is, the techno-social conditions from which internet memes emerged in the 2010s. Particularly relevant to this reading is the increasingly profitable relationship between internet technics

and data; and specifically, how the use of internet technics is parlayed into data and thereafter assetised. The assetisation of internet technics is, I argue, tantamount to the privatisation of the social realm by way of its mediation and production by financialised technical arrays. More, I will suggest that the encroachment of this political economic dynamic can be historicised in line with the effective privatisation of the internet from the 1990s onwards – and can thereby be expounded by positioning internet memes as a diagnostic tool, or "cut", through which their conditions of emergence can be parsed. Considering the creation and significances of internet memes in this context is, I suggest, troubling – given their proliferation through the use of financialised technics in social contexts recuperates the act of proliferation as a value form, and thus renders *memetic* social practices alienable.

It is fair to characterise the position I am furthering here as being a Marxist-informed – and one that specifically draws on a rubric theorised by Jodi Dean dubbed "communicative capitalism" (2005). For Dean, a communicative capitalist paradigm renders gestures of communication – that is, the use of media agnostic of intent –the point at which value is created. I suggest that in relation to the proliferation of internet memes, their specific ontological configuration – as accreting numbers of reproduced and remixed instances aggregating into legible corpuses – ascribes them heightened and revealing significances to communicative capitalist paradigms. This is because the very emergence of the internet memes within a financialised context of media ubiquity is predicated the materialisation of memes being achieved through the social use of privatised, and therefore revenue or asset generating digital technics.

To add specificity to the ascription and accrual of value that I suggest culminates in and is typified by the internet meme, I will first draw on the business model developed by GIPHY – a company referenced briefly in Chapter Four. Noting that GIPHY's services are free at the point of use, with its market value thus contingent on anticipated use parlayed, via data, as an asset, I will expound GIPHY's model as *rentierist*. A concept mobilised by Guy Standing (2016) and Kean Birch (2020), rentierism in the context of technical media as services describes the business model in access to participation in social practices – such as creating or sharing a GIF online – is controlled by private entiries who locate access to these

services as a resource. Thus, that the internet meme is both proliferated via the use of these services *and* significant to the social practices that are realised through them, suggests that once again, memes are representative of their conditions of emergence. Thus, this is not only a broad claim that internet memes are co-constituted by capital because their co-constituting technologies are privatised. Rather, I suggest that memes also have a function as commodity forms within that milieu: as phenomena that both leverage and habituate usage and engagement with internet technics, which in turn is recuperated as value by platform owners, as data.

In the latter part of this chapter, I will turn my attention to an internet meme that gained popularity in the chaotic wake of the 2016 U.S. presidential election which explicitly discussed the internet meme in financial terms; as assets within the "meme economy". Aggregating on a reddit forum, contributions to this meme would comprise deliberation as to whether a newly created meme template or exploitable would become popular, and if so, when the popularity would subside. To do this, contributors would pantomime financial language – with refrains of "invest" or "sell" reflecting the confidence community members had in an incipient template. As a meme then, the "meme economy" comprised discretised instances – including text contributions, images, and screenshots – made felicitous in respect to the fixed or shared concern of gauging a memes likely popularity. And though this was an arch endeavour, I will suggest the critique proffered by these meme economists was incisive, anticipating as it did not only the proliferation of any given meme type, but that within a techno-social conditions of financialised media ubiquity, that proliferation has a value form.

That is, that the memes brough forth from this near contemporary milieu are, whatever their form or function, already-commodities. Given that the techno-social conditions identified in this chapter are characterised as comprehensive, to conclude I will posit that privatisation of proliferation speaks to the problematic of *foreclosure* – another concept explored by Dean (2005) and elsewhere by Byung Chul Han in his formulation of the *positive dialectic* (Han, 2015). And to consider a meme as a cut, or aperture into

these techno-social conditions of emergence suggests that the memetic logics of proliferation emerge as an apotheosis of capital.

A Mediated Life

The internet memes that emerged in Anglo/U.S.-centric discourses in the mid-to-late 2010s were proliferated in a context characterised by privatised media ubiquity; emerging from conditions of existence that rendered them always-already commodity forms. Much scholarly work has been undertaken in recent decades to theorise how media ubiquity has brought with it a rerouting of power – including Scott Lash's diagnosis of a "post-hegemonic" paradigm in which power is exerted immanently as a consequence of commodity media forms being intrinsic to the life-world (2007), David Beer's critique of the disciplining powers of algorithms that comprise the interactions of everyday experiences (2009), and Safia Noble's account of how racialised biases are inculcated and reproduced in data societies (2018). Of course, implicit within these theoretical perspectives is an acknowledgement that media forms – and particularly digital media produced by and viable as business concerns – have assumed an imbricated position within the mediation of the everyday.

For Mark Deuze (in reference to Sam Inkinen's "mediapolis"), media ubiquity was realised through the comprehensive mediatisation; that is, the entrenchment within life-worlds of privately owned technical media whose services underpin, afford, and arbitrate the experiences and expressions of everyday life. For Deuze, this paradigm was succinctly termed *media life* (2011). That this *media life* was mediated by digital technics operationalised as services – including media that comprise the assemblage of the technics we call the internet – results in the cultivation of "complex, physical, physiological, economic, and social

formations" characteristic of the 21st century (Hayles, 2007) in which people and technical media are entangled in entrenched and recursive configurations.

These claims resonate with Stiegler's thinking in respect to the irreducible, though asymmetric – or rather constantly reconfiguring – relationship between the technical and the social, which throughout this work I have positioned as the iterating conditions of emergence which proliferate memes as *gramme*. Therefore, it is within such a configuration that internet memes in more recent times must be understood to emerge; as phenomena brought forth as a consequence of proliferation occurring within and through an industrialised, and moreover financialised techno-social array. As introduced in Chapter Three, and further considered in Chapter Four, the ways in which internet technics are technical prothesis productive of tertiary retentions. Therefore, if the conditions of emergence from which contemporary internet meme forms are brought forth are financialised, then those memes, as tertiary retentions will have emerged in ways constituted by technic engineered in service of market motives. Consequently, the memes proliferated and committed to tertiary memory and otherwise imbricated in the practices of everyday social life have emerged in ways contingent on and reflective of their (financialised) conditions of emergence.

The thematic consequence of the practices of everyday life being leveraged within an extractive, financialised dynamic – parsed through the internet meme, positioned as aperture, as *cut* – is one of extraction. I admit that this might appear a jarring approach, but apprehending an internet meme in such as way is intended to dishabituate somewhat. After all, the conditions of their emergence – financialised techno-social, media ubiquity – after Mark Deuze, are characterised by "invisibility" (2011), having encroached, according to Tarleton Gillespie by stealth, with the frictionless qualities of the digital media forms that have become so predominant "[obfuscating] business models and technological infrastructures" from users (2010).

This trajectory itself was itself, of course, a contingent emergence. One inflection point, and precondition the realisation of media ubiquity is the Telecommunications Act of 1996; a change in U.S. legislature that served as a starting whistle for companies seeking to establish themselves as private internet service providers. The act was essentially deregulatory - and in so being was a welcome shift for technology companies who envisioned the predominance of a proprietary internet based on licencing models, while a chagrin for those whose ethical position was rooted in the "Copyleft"-inspired freeware model associated with Web 1.0 (Bambury, 1998). The practical legacy of the 1996 act for the techno-social milieus emerging on and from the web was the emergence of a variety of providers vying for market predominance, with both the backbone (Shah, 2007) or "pipes" that comprise infrastructure, and "the flow" (platforms which supported content production and social interactivity) privatised. Subsequently, Comcast, Netscape, AOL, Google, Microsoft, and Apple were vying for market share (with the act ultimately ensuring a monopolistic, rather than pluralistic market emerged) which was in essence, a competition to ensure a user's time was spent on the service provided, and not on that of a competitor. The stakes were high, with millions of (soon to be) internet users comprising an untapped market, with the victors swelling into big tech behemoths whose business models were contingent on privatising access to the web. That is, by the 2000s, short of a few strongholds (such as the Free Software Movement) the open-source model with the proprietary software and service-based models characteristic of Web 2.0, once and for all (O'Reilly, 2009). The general-purpose user had a general-purpose internet.

Under this sign, numerous technology companies were to strive provide user-friendly internet services – be that broadband, infrastructural service provision, personal devices, web browsers, websites, blogs, word processing and editing softwares, email services or social networks. Fast, easy to use, the technical services rolled out would, over time, become indispensable to daily life, a habituation that occurred within a wider context of the digitalisation business operations, civic services, and cultural sector activity (Miraz, 2015; Coletta, 2017). To say a privatised internet emerged by stealth then, is to recognise that these services were delivered with a smile, producing excellent products and truly paradigm altering technologies, first desired by users, before becoming for many essential. That is, oiled by progressive narratives, providers competed over sectors, specialisms, and market shares in order to insist upon the ongoing use of the service being put to market.³⁰

This shift – only described above in synopsis of course – was nothing short of a reconfiguration of techno-social life-worlds, and the combination of factors that brought forth the conditions of *media life*. Consolidated by the launch of mobile media forms such as smartphones and wearables, and the second dot.com resurgence of the 2010s, digital connectivity repositioned as intrinsic to, and characteristic of social interactions, bringing forth new forms of art, literature, and discursive practices (such as the aesthetic tropes cultivates by platforms such as Instagram (Jurgenson, 2019) and the affectless expressive mode of alt-lit). And while I can only point to the reach and depth of this shift in this chapter, the broader context is pertinent to the discussions of digital platforms that follows; given that the business models pursued by platforms were themselves contingent upon and constitutive to the wider financialised reconfiguration unfolding.

Admittedly, even the descriptor "platform" – which I will continue to use throughout this chapter – requires some qualification. Indeed, the very term "platform" is (correctly) considered a misnomer for some (Gillespie, 2010) or else "imprecise" (Tarnoff, 2019) – a poor metaphor cultivated in tech discourses that infers a stage for giving voice in a new public square as a means of obfuscating the characteristics of these services, whose interests are fiduciary rather than civic. Moreover, "platform" can refer to a wide swathe of digital media and services as inferred above, including public-facing social sites, sites for commerce, back-end product suites, and infrastructural provisions from the likes of Microsoft Azure; all constituent to the *bewildering array* of technics that comprise the internet. Duly noted, the ill-fit of the term platform is acknowledged but lived with in this thesis work – while the salience of the platform to the proliferation of internet memes, as expounded in Chapter Four, as emphasised. For it is through the use of digital platforms, as websites and apps, particular in this thesis, message boards and

³⁰ A dynamic productively resisted by Olia Lialina in her 2012 essay "Turing Complete User"

social media sites, that internet memes proliferated in a way particularly implicated in financialised extraction.

The extractive model of digital platforms was considered by Nick Smicek, for whom the 2010s was a paradigm of *platform capitalism* (2017). Couched as an emergent business model made possible as a result of the privatisation of internet infrastructure and market responses to both the dotcom bubble of the 1990s and market crash of 2009, Srnicek's framing of the platform model locates it as an economic entity realised within the context of deregulation and concomitant privatisation of internet technics. In broadly considering digital platforms as designed to serve as intermediaries between two or more groups couches them as operations that seek to make the provision of interactions – social or professional, private or public - Srnicek's articulation of the platform identified ongoing use that which makes the platform viable as a business. More, the platform here is asserted as indicative of a broader iteration of capitalism in which value is extracted from the use of digital services. Advancing this formulation in their 2019 article on "data colonialism", Nick Couldry and Ulises Mejias offer specifics on how data becomes reified into a resource, noting that this is through making mediated social relations – be they personal, private, transactional, or professional – alienable So while a platform capitalist includes the mediation of transaction types that have antecedents in prior paradigms – such as mail order, subscriptions, mass distribution, or sponsored content - the primary means for value extraction in platform capitalism is not derived from being paid to distribute or access content. Instead, social platforms are typically free at the point of use, with the value derived from user engagement, parlayed as data capture, which is then ratified as an asset. This dynamic speaks to the salience of considering the co-construction of internet memes proliferated through the use of digital platforms. My proposition here - that within financialised media ubiquity, the memes that are co-constituted by these technics are rendered commodity forms – is evinced well in relation to GIPHY.

Of all the GIF aggregators that emerged in the late 2010s, GIPHY was to become the most popular, possessing a winning combination of ease of use and an extensive GIF database tagged up with key words to aid discovery. Launched in 2014 as a venture capital funded start-up (receiving \$150.9m in A-D funding rounds between 2014–16), GIPHY's primary offer was the means by which new GIFs could be created, or existing GIFs retrieve from its publicly accessible database of GIFs via its search facility. It developed a database search service both via the website giphy.com or via the GIPHY app, both of which allow for users to search for a GIF based on keyword search, such as of a film title, actor name, colour, animated character, or emotion. More, in offering these services, GIPHY made itself integral to the creating, sharing, and retention of GIF memes, developing its services as an aggregator, database, and substructure through which GIFs can be propagated. In becoming an intermediary in this manner, GIPHY was making itself a useful product. GIFs aggregated by Giphy benefited from their SEO in the 2010s and, indeed, encouraged GIF creators to consider GIF SEO when submitting to the site (Geyser, 2021), all of which meant that GIPHY-hosted GIFs were also ranked highly in Google Image search results. In practice, this meant searches such as "Oprah gif' would reveal Giphy-aggregated images in response to search queries. Further, GIPHY inserted itself within other social platforms as a means by which it would allow their users to retrieve GIFs. According to a Medium post on GIPHY, by 2016, GIPHY's search "was present within Slack, FB Messenger, Twitter, Microsoft Outlook, Google GBoard, iMessage, Tinder, Bumble, Whisper, Telegram, Viber and countless others...all powered by GIPHY" (2016). GIPHY's popularity with these platforms was no accident; they had made themselves easy for developers to incorporate into their platform, having made available Software Developer Kits (SDKs) optimised to ensure GIPHY could be plugged in with ease. In essence, GIPHY's deft move was to position themselves as the very infrastructure though which GIFs were hosted, retrieved, and distributed.

This predominance is an example of a platform possessing the means to shape memetic interactions, given that if a person wants to share a reaction GIF via Slack, GIPHY will suggest a reaction GIF for use, and this may influence which meme is used in the exchange. GIPHY's therefore provided the infrastructure, and in so doing provisioned access for users to share GIFs in a frictionless manner. And it

was free all to use. Yet, though GIPHY did not charge its users, or charge for its infrastructure it did receive funding from venture capital between 2014–16 amounting to \$150.9m.³¹ So what asset then, was GIPHY predicted to be in possession of by its investors?

GIPHY's became assetised in ways tallied against its ongoing use. It was invested in, and was expected to yield returns in corollary with its imbrication within conditions of media ubiquity. As such, it wanted the (arguably dated) GIFs meme format to remain popular, to ensure GIPHY's infrastructure still served a purpose. So, it boosted them. This was not the first time a platform had championed the GIF: Earlier in the decade, the GIF meme format had been promoted via Tumblr's Radar (Ulanoff, 2016, cited in Miltner, 2017). But GIPHY's approach was far more comprehensive. In 2016, it opened its first creators' studio, "Studio Originals" - a business arm that would work with creators - whose remit was to produce new GIPHY-owned/watermarked GIFs. In 2017, GIPHY bankrolled a suite of broader awarenessraising activities in the cultural sector, such as sponsoring an "IRL" GIF-based art show. They rolled out brand partnerships to ensure that brands were represented within their database. GIPHY even had a guerrilla wing, dedicated to boosting the practice of reaction GIF sharing in response to high profile events, with GIPHY staff producing reaction GIFs in real time, during events such as the VMAs and the Tonys. GIPHY also partnered with both the Republican National Committee and the Democratic National Committee in 2016, as the then-presidential candidates locked horns in that election cycles' fractious debates (Highfield and Miltner, 2017). Those Trump reaction memes that, as tertiary retentions, have haunted our imaginations since 2016? We can thank GIPHY for a good number of them. GIPHY's purposeful creation, boosting, and proliferation of GIFs was multifaceted, and in being created did not inaugurate the format's popularity, but anticipated its ongoing proliferation, and capitalised upon it. And

³¹ It is worth also worth noting that GIPHY garnered a \$400m price tag in 2020 when bought by Facebook (a move the UK regulators reversed). That price tag can in part be explained in the words of GIPHY Chief Operating Officer Adam Leibsohn, who in 2016 commented that "[the] holy grail for a brand advertiser is to be able to directly and uniquely align with the brand value... If you stand as a brand for 'joy' or 'fun,' GIPHY is uniquely positioned to promote it through paid search [...] then suddenly people are using your content to express the very emotions you stand for" (quoted in Inc.com (2016) – while concerns about data monopolisation were also cited by the UK competition watchdog.

in doing so, ensured the relevance of the services it provided, through which (more) GIFs were stored, remixed, and proliferated – and accessed. That is. GIPHY was doing what it could to insist upon its own use.

GIFs For Rent

I posit that in being able to forestall – and perhaps engineer – its ongoing viability, GIPHY is best understood as a *rentier*. As outlined by Brett Christophers in his 2020 book *Rentier Capitalism*, rentierism is a rubric that sees entities accrue income from rents "derived from the ownership, possession or control of [assets] under conditions of limited or no competition" (Christophers, 2020). Such companies need not produce or own assets – they just need to control access to them in a monopolistic fashion. In respect to GIPHY, the "resource" they control is their GIF catalogue, GIF generator tools, and the infrastructural endpoints via which the GIFs in their database are readily accessed and shared. And the "rent" extracted is paid in engagement – use – *qua* data, which is parlayed into market value, as an asset saleable to advertisers, or through other forms of data insights deemed useful.³²

The notion of "rentier" is not itself novel of course. It has a long lineage in respect to property markets.³³ However, as recent scholarship has proposed, the rentier model has also found expression within the technology and communications sectors: from the aforementioned licencing of software pioneered by Microsoft in the 1970s (Karjala, 1999), and likewise to the privatisation of the once state-owned material "backbone" infrastructure of the internet that occurred in the 1990s (Shah, 2007). And, as noted by Jodi Dean in a 2022 essay for *Sidecar*, rentierism can also be used to frame the operations of a number of 21st century platforms that provide forms of services. Dean's essay deals directly with "sharing economy"

³² Though acknowledged, the scope and focus, practicalities, mechanics, or ethics of datamining are not addressed in this work (see Zafarani, 2014 and Kennedy, 2016, for examples specifically engaging with these concerns specifically).

³³ I acknowledge that rentierism bears significance to the broader concept of financialisation. This has not been addressed in detail in this work. However, for clarity, I am here proposing that rentierism can be understood as an explication of process, while financialisation is a tendency and trajectory

business models, such as Uber and Airbnb, which seek to accumulate market value by inserting themselves as handy intermediaries facilitating transactions between clients and services. In other sectors, digital models may be explicitly rentier in makeup: Take PaaS (Platform as a Service) and SaaS (Software as a Service) provisions common in the IT sector: services offered by large technology companies such as Microsoft and Amazon Web Services as a means to provide hosting and other infrastructure functions to clients on a subscription basis. Such models allow clients to pay tech powerhouses for out of the box services that alleviate the need for them to maintain a full Information Technology team, creating both efficiencies and dependencies in a dialectical manner.

Importantly, such a model need not only apply to interactions that are overtly transactional in character either. The model of "data rentierism" has been proposed by Birch, Chiappetta, and Artyushina (2020) (among others such as Sadowski, 2020). Data rentierism is a business model in which digital platforms can acquire capital value by brokering interactions between users that (unlike Uber) are not necessarily transactional in quality. For Birch *et al*, such entities are rentiers because they levy "rents" paid in engagement, parleyed as data – with data accumulation and ownership being the asset that underwrites share price as tallied to the anticipated value of data to the market. Data rentiers then, become viable as business as they scale in size and usership through processes of network effects and, critically, by retaining users and remaining in use. This model would apply to social media sites that function as advertisers or to convert datasets into insights monetisable for other purposes – or any company whose assets value is underwritten by data aggregated through engagement with a service delivered free-at-the-point-of-use. In practical terms, this model requires companies to both "grow" their user numbers, while also incentivising user engagement, ideally achieving monopoly status by becoming the go-to service for the provision of the interaction in question.

As outlined by Kean Birch (2020) data rentierism shares sensibilities with IP protectionism, where patents function as a class of technoeconomic object which, supported by legal and governance principles, render the protected item alienable – whether the item under patent is tangible or not. It is through this dynamic

that the model of data rentierism is resonant in the operations of social media platforms, with services such as Facebook providing the technical means via which forms of cultural practices are animated, rendering social practices alienable as financialised techno-economic behaviours. Put otherwise, the business model being pursued by making the cultural practices that comprise everyday life alienable is essentially the privatisation of social activity. Further, to in adherence to the model being perused, companies behaving as data rentiers must ensure growth and ongoing engagement to ensure ongoing viabilities as market concerns. They should, in other words, become indispensable to users – they must become so integral to the infrastructure of discourses, as to insist on their own use.

This was indeed the approach quietly rolled by GIPHY. Moreover, I suggest that GIPHY is indicative of how digital intermediaries seek to insist upon their use in order to extract a form of "rent" from their users who, while using their services, proliferate memes. This business model is predicated on digital platforms through and from which memes are proliferated becoming entranced in the practices of everyday life. Therein, the memes proliferated are representative of both the extant techno-social milieu being co-constituted by financialised technics *while* serving to further entrench the ongoing use of the affording technics though underwriting their necessity to sustenance of an essential form of gramme. Thus, while some digital platforms may charge subscription fees as levies, data rentiership extends to conceptualisation of the dynamics at play to include rent paid in kind, placing emphasis on rentierism being predicated on ongoing and sustained usership and engagement. And in being both generative of and anticipating the further accumulation of use, and thus data, internet memes too, as proliferate phenomena, can be understood as being made alienable. Which is to say, that in line with the characterisation of memes articulated in this thesis, internet memes (GIFs in this particular instance) can be seen as both materialised from this arrangement, and due to their significance in social practices, implicit in the habituation of the techno-social conditions of financialised media ubiquity. Indeed, since it is through insisting on itself that a rentier platform sees its services sustainably translated into the capital value, then the meme as broker of scaled forms of sociality contingent of proliferation becomes implicit in the ongoing assertion of platform and capital predominance.

This of course, is not just theory: the economic effects of this configuration are reflected in Market Cap's list of the 10 companies with the highest global market cap (Anon, 2022), which at the time of writing have not changed substantively since big tech supplanted oil conglomerates in 2015 (Desjardins, 2016). These ranks include Apple, Microsoft, Alphabet (the parent to Google), Amazon, and Meta (previously Facebook), along with a transistor manufacturer and an oil company. It also includes Tesla, an enterprise that does not make a profit from selling its primary product (cars), but instead remains viable through the sale of scarce government subsidy electric vehicle (EV) credits acquired in the 1990s, unfortunate FTSE 500 investments, and a good dollop of memetic hype (Trainer 2022). Though a vulgar summary, I cite this list here as I find it telling that the technology companies within it function either partly or entirely as monopoly rentiers - providing access to information, connections, clients, and services - with value asserted or promised by assetised IPs or already realised though levies paid in data, which are demanded in perpetuity though their ongoing self-insistence. These are the predominant forces of the *benildering array* through and from which lives are led. These are also the proprietors of the constituent elements of the technological arrays from which the internet meme emerges and sustains, and in being so, see their forms and tendencies expressed in the meme form. Put otherwise, if ubiquitous mediation sees human communicative tendencies positioned as a resource for extraction by platforms insisting on continual and accumulating engagement, memes realised in such conditions must be considered to be heavily implicated in this diagnosis. This is both due to their formal and functional co-constitution by the techno-social, and also a consequence of the meme as a communicative gesture itself being predicated on mediated acts of proliferation. Conversely, the reification of memes in service of capital is indicative of a life lived within ubiquitous media.

Concern about the deleterious effects of the overreach of financialised mediatisation have long been in discussion – as identified by Jodi Dean in 2005 through her concept of "communicative capitalism" (2005). Communicative capitalism is a mode in which communicative exchanges form the basic elements of production and from which value is extracted. Under communicative capitalism, value is not located in

what is said, or how, but rather in things being said at all, and in being so, reified as a resource for extraction as achieved by the communications being enabled by the media companies that seek to privatise cultural practices. In Dean's own words, this comes from the vantage point of a proprietorial entity seeking to assert and retain power through capital:

Particular content is irrelevant. Who sent it is irrelevant. Who receives it is irrelevant. That it need be responded to is irrelevant. The only thing that is relevant is circulation. (p. 107)

Dean's perspective explains how communicative capitalism morphs from an engagement in cultural practices into a contribution, rendering it "simply part of a circulating data stream" (p. 107) - a conversion that Dean articulated as depoliticising; for if capital power is tracked against media ownership and the provision of techno-social services to community, then the use of those services, even for the purpose of opposing capital, can be recuperated in service of it. This attests to how communicative capitalism becomes predominant through its ability to foreclose and entrench, since it can readily accommodate anti-establishment, anti-hegemonic viewpoints within the range of social practices afforded. Elsewhere, the exploitative tendencies effected through the financialisation of mediated sociality have been articulated through concepts such as the attention economy (Webster, 2014; Wu, 2017) and surveillance capitalism (Zuboff, 2015). Reading through these different lenses, it can be seen that the rendering of human cultural practices is a resource, recuperable in service of capital, even when capital power is being opposed. Indeed, to return the centrality of the platform to this dynamic, Srnicek went as far as to use the (not uncontroversial) metaphor of oil when considering data: a resource "to be extracted, refined, and used in a variety of ways" (p. 56). Likewise, Nick Couldry and Ulises Mejias's notion of "data colonialism" (2019) implicates data as a resource for extraction, with techno-capitalist powers recuperating mediated communications as a collective resource from which profit is gleaned.

Such conceptualisations are, I posit, diagnoses of a prevailing tendency to privatise cultural practice, with the rubric of data rentiership serving as the mechanism through which value extraction is achieved. Couched so, the platforms designed, released, and popularised under the auspices of financialised media ubiquity can be understood as products that are not instrumentalised by business, but delivered as part of the business logics that ultimately seek to reify the social practices of everyday life as resources for extraction. Once more, memes, and specifically the internet meme as it tended to emerge in recent history stipulates the necessity of thinking the co-constating relation between technics and the social, and thereafter the composition of life-world that unfolds. As processes of grammatisation, apprehended as cuts, this contiguous dynamic of mediation is exposed, and their conditions of emergence revealed.

It's The Meme Economy, Stupid!

There was a quasi-ironic joke among the fragile, febrile, and temporary alliance that proliferated pro-Donald Trump and anti-Hillary Clinton memes in the 2016 US election; among those who claimed that Trump was being "memed into the presidency" (Ohlheiser, 2016; Heiskanen, 2017; Merrin, 2019) and even that he was an "emperor god" whose strength was bolstered by the proliferation of Pepe the Frog memes. For some, the using memes to disrupt or reroute discourses in the service of Trump's 2016 presidential campaign was "meme warfare" (an unhelpful term, arguably, see Phillips, 2019). For others, it was, archly or in earnest, "meme magic" – a redux of the mid-20th century occultist derivative "chaos magick" (phenomenon discussed in relation to Discordianism and guerrilla ontology in Chapter Two). One element of this esoteric practice asserted that the purposeful creation of "sigils" – artefacts such as drawings representing ones will, codified symbols, or if you will, a form of *gramme* – aid in manifestation technics. If one materialises a thought, or a will into a codified form, one can manifest this will into being. Perhaps unsurprisingly, within this doctrine the wisdom was that the more sigils created, the greater power one leveraged. Indeed, the specific Chaos Magic-esque practice being adopted by Trump acolytes in and around 2016 was the proliferation of sigils – internet memes – with "meme magic" being the insertion of Trump, and all he symbolised into discourses, whether his sign was beloved or abhorred. I recall this moment not to give such practices credence as magical acts of the supernatural variety, but to consider it in relation to the definition of magic offered by practicing chaos magickian Alan Moore in 2003:

I believe that magic is art and that art, whether it be writing, music, sculpture, or any other form is literally magic. Art is, like magic, the science of manipulating symbols, words, or images, to achieve changes in consciousness. (2013)

In providing a tenable link between mediation and magic, Moore's statement is resonant of prevailing stances in media studies, including those cited throughout this work – principally Stiegler, as well as Kember and Zylinska (typified by their observation about the "the inseparability of mediation and reality" (2012, p. 27)). For though expressed in different terms, in the context of a media ubiquitous world, the techno-social is entirely constituted in the bringing forth of life-world, which includes their distortion, manipulation, or other form of disorientation brought about (within Stiegler's concern) by industrialised technics. Meme magicians then, were perhaps sensitive to the effects of these conditions of emergence – in which the act of *meme-ing* something into existence can impinge and calibrate discourses, and lifeworlds, the technical conditions which make this so become ethically implicated. Their mistake (and it was no small one) was believing the power to realise these shifts was theirs alone, rather than one afforded by the techno-social milieu in which they operated.

For, set against the context provided earlier in this chapter, "meme magic" as achieved through the incoherent, shitpost-ridden, irony-laden, think-piece inspiring, proliferation – realised within a financialised techno-social in which proliferation was not only desired, but necessary for its ongoing viability – was less an act of magic, but conclusion of a deep logic. Indeed, it is worth noting that despite the controversies they caused and necessary attentions turned to them, meme magicians were by no means alone in intuiting and leveraging the power of meme proliferation – with the logics of virality and meme proliferation operationalised for marketing and other attention-garnering endeavours exploited for different intents before and after the furore of the 2016 U.S election. Once more then, without drawing equivalences with the tactics of entries such as *BuzzFeed* and self-proclaimed "meme magicians" beyond

their shared interest in the operationalised logics of meme proliferation, addressing the tendencies that resulted in "meme magic" and viral marketing alike speaks to the constituting role of technics in these social practices. "Meme magic" under such auspices then, an expression of the logic of the meme as realised under communicative capitalism.

Yet while meme magicians might have intuited the effects of their endeavours, it was their lesser-known contemporaries - the "meme economists" who seemed to have an astute grasp of the conditions of existence being grappled with. These "meme economists" consolidated as participants in the r/MemeEconomy subreddit, expressing felicity in relation to a suitably recursive form of meme making assembled around deliberations concerning meme proliferation (Literat and van den Berg, 2019). To understand the meme economy, one must first understand the meme cycle: a related internet meme that gained popularity around 2016 in which the expected popularity and saturation point would be predicted, taking into account a novel memes likelihood to appeal or resonate with general audiences, be amplified by media discourses, proliferate wildly, be ruined by a think piece, and become oversaturated, stale, or to use the proper term, *cringe*. (An important coda to this life cycle might be that if a meme remains dormant for some time after its decline, it may be used again in an ironic, nostalgic sense in a well-chosen context once enough time has passed.) That is, central to the *meme cycle* meme was one anchoring concern, which was, the (seemingly predictable) ways in which internet memes proliferated. The meme economists simply took this premise one step further, and used their subreddit to aggregate and discuss in a mock financial language aping stock market traders whether incipient meme types would gain traction before attaining wider - or in some cases, mass popularity - across multiple community groups and platforms or within broad public discourses before reaching their saturation point, before, becoming oversaturated and declining. A promising meme, which showed signs of appealing to wide and varied collectives, and thus aggregate as modified, proliferating instances, was a sound "investment". A dangerously over-saturated meme – instances of which were everywhere, exhausted -- would be rapidly "sold".³⁴ Despite a mock "NASDANQ" stock exchange emerging during the height of these activities, negligible money actually

³⁴ It of note that r/memeeconomy participation increased during 2016, tracking with the consolidation of memes in public imaginaries consequent to the 2016 US Election.

exchanged hands in these interactions. Rather, meme economists were themselves contributing instances to a shared meme, with the choices made by participants to either "sell" or "hold" their stock expressed as grammatised gestures, symbolic both of a specific novel meme's anticipated lifecycle, but that such phenomena could be anticipated as having a lifecycle as such at all.

The contributions to this meme corpus were highly varied. Participants produced their own literature, in the form of diagrams (see Figures 27 and 28 below), piqued with terminology: *dank* (cool, ironic, as referenced in Chapter Four) (see Figure 29, below), *stale* (old and saturated), and *forced* (manufactured rather than rooted in organic growth) – terminology which itself would start to proliferate, yes, as memes. And while engagement with the notion of the meme cycle inferred a recognition of the ways in which community boundaries are mediated by memes (Nissenbaum, 2017) – and in particular how they include recognition of community insiders vs. normies – this was done less in respect to any one community and its vernacular, and more through an anticipation of how a meme's proliferation would determine its putative value and cultural cache. So, while the use of memes to confer status and communicate around specific interests has long been understood as a social, vernacular practice (Milner, 2013a; Kostadinovska-Stojchevska, 2018; Denisova, 2019), the recognition of the "meme cycle" inferred that meme-making itself had become stipulated as a practice that arbitered social interactions, where knowledge of such practices itself was located as a means for demonstrating cultural capital through memetic exchange.

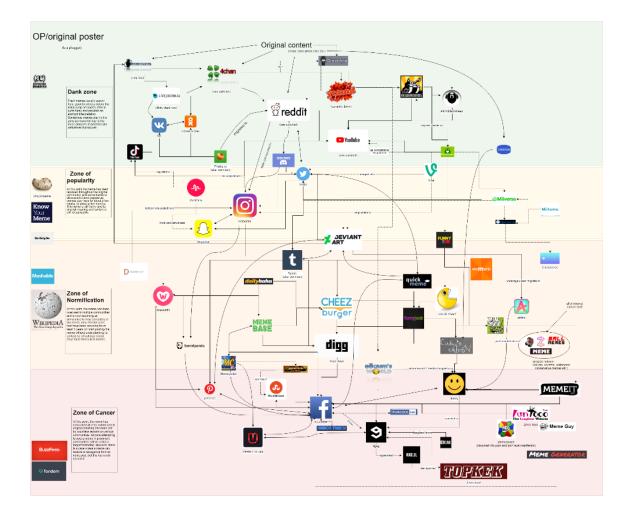


Figure 27. A" meme cycle" chart submitted to subreddit r/dankmemes



Figure 28. A (revealingly outdated) 4chan submission documenting the life cycle of the Pepe the Frog meme, as of 2016



Figure 29. An example of the Child Gnome meme series, citing the "dank meme" trope

The meme cycle spoke to the ways in which invested communities acknowledged the mechanics of meme proliferation and incorporated discourses about them into community negotiations. Such a turn was an explicit recognition of the communicative efficacy of memes, as delivered through proliferation, and in so doing this conferred coded meanings and significance. In anticipation of this, the meme cycle mapped a meme's cache against axes of popularity (and saturation) and ascribed "worth". The idea of a meme's "worth" was further engaged with in the related notion of the "meme economy".

In particular, as noted by Literat and van den Berg, the group appraisal of memes was contingent on "its positioning in relation to the mainstream, its versatility and expansion potential, its topicality or cultural relevance, and its perceived quality" (2017, p. 1). That is, aside from any putative monetisation of mememaking (as a meme account – which refers to a social media account which shares memes, which if popular enough, can leverage their size and *brand* to gain advertising deals) the putative value therein was tracked against *anticipated* proliferation of a meme within social contexts, as opposed to any one meme becoming valuable in monetary terms. So, despite community members coding up platforms for imitation, stock-market-esque trading, and the launch of the community's own "business" publication, the *Meme Insider* in 2016, r/memeeconomy was strictly "kayfabe".³⁵ This suggests that community estimations of "success" ascribed memes speculative determinations of "value", with this determined in this case in relation to the meme's likelihood to proliferate, and at what scale, in what space, and at what pace.

In a number of respects, r/memeeconomy participants were behaving as a standard interpretive community; parsing proliferating memetic exchanges as they were keyed (Shifman, 2013a) to confer community vernacular. Participants adopted the tonality appropriate for the community (irony-heavy and mock sincere, studded with finance jargon) as a vernacular tactic evidenced in many discourse analyses of meme use (Shifman, 2013b; Milner, 2013a; Phillips, 2018). The use of irony has long been a powerful type of keying present in memetic vernaculars (Gal, 2020) – and indeed, as seen in Chapter Four, this is a dynamic that has been much theorised in relation to its significance to the Alt-Right and reactionary trolls active during the 2016 U.S. presidential election campaign (Greene, 2019; Munn, 2019). Moreover, the use of irony as a communication tool is not itself new – having always been a tricky tonality to intimate in non-proximal gestures, as lexical innovations such as the irony mark speaks to.³⁶ Indeed, the difficulty is expressing and understanding irony in dialogue is precisely what makes it such a powerful expressive tactic. In other words, discussions of the meme cycle and the meme economy have required a nuanced negotiation of the meme form as a cultural phenomenon inclusive of the direct or ironised modes of proliferation achieved across the variegated vectors of content, form, or stance.

³⁵ As referenced in Chapter 3, "kayfabe" is a term derived from professional wrestling, which describes the act of portraying a performance understood to be staged as genuine or authentic.

³⁶ The "irony mark" – an inverted question mark – was proposed in the 19th century, but was ultimately rejected as a means via which irony would be denoted in written texts.

What makes the interactions arbitered around the meme cycle and meme economy so piquing then, is the stipulation of the meme itself and, moreover, the meme's contingency on proliferation as the cultural knowledge that underpins the forms of memetic practice being engaged in. For these communities, meme-making and associated discourses became the meme - with meme-making becoming the subject of their memetic cultural practices. A significant point emerges from this reflexive dynamic: these communities implicitly acknowledged that a meme cannot be conceived of only as an artefact replete with utility. In supplying the meme with "value" as a means of engaging with meme-making itself as a memeform, these communities located and anticipated proliferation as it was afforded by media as part of the meme itself, as opposed to an action undertaken only in order to circulate any given meme example. This extensive reading of what memes are - perceived in artefactual terms but animated and defined by the gestures of proliferation that realise them, and thus co-constituted by the technical and social contingencies that realise the meme - tracks closely with Goriunova's claim that memes are best understood as humantechnical performances (2013). This meme was no longer an artefact. - no longer "concrete phenomena such as particular YouTube videos" (Shifman, 2013a, p. 364) or images, text video, sounds (Knobel and Lankshear, 2007); but a condition of ubiquitous mediation – a dynamic also seemingly intuited, if not understood, by so-called "meme magicians".

And in respect to this work, these moments of acknowledgement as to how and why memes proliferate in ways afforded by the techno-social conditions extant to them, returns us to the implication that memes, during the mid-to-late 2010s were co-constituted by a financialised techno-social milieu – which I would argue can be described as, through platformisation, operating along a rentier model of capitalism within media ubiquity. In respect to this, I would suggest that the "meme cycle" meme (more than "meme magic) and the community activity of r/memeeconomy provide a reasonably incisive critique in terms of the implications of this dynamic. Sure enough, r/memeeconomy presaged debates emerging later in the decade that were centred on the relative value of scarcity and proliferation within digital paradigms, with mechanisms such as the attempted creation of scarcity through the minting of Non-Fungible Tokens (NFTs) playing out similar dynamics within the equally made-up crypto-markets. But further on from this, in dealing with the anticipation of meme proliferation within the concerns of a meme series, these

memes dealt with the ways in which memes themselves had been reified: made alienable and replete with "value" determined in ways contingent on their propensity to proliferate. At the same time, meme cycles and meme economics represent a kind of obliteration of the meme as bounded thing, and instead, correctly acknowledges it as a communicative behaviour: a consequence of being-in-the-world and of being proliferated as cultural practices are afforded across and with media.

In locating meme-making and meme proliferation as a meme in itself, r/memeeconomy explored the relationality between memes and their extant techno-social conditions by acknowledging the anticipation and significance of proliferation within a platform with a rentier model. In apprehending and anticipating that memes will proliferate within community discourses, participants in these cultural practices recognised that such conditions cultivated and indeed requested proliferation as a form of social practice. And while their attribution of a meme's "value" was ascribed in play, with the monetary value proxying for cultural cache, the move to deliberate over and gauge memes in these terms indicated that the meme per se, whether in terms of monetary or cultural capital, could be recognised as alienable – as reified. Given that my assessment of the techno-social conditions in the mid to late 2010s were those of ubiquitous mediation financialised through rentier platforms, I find the mock reification of the meme to be apt. As I have argued in this thesis, media ubiquity through a rentier model seeks to make the business of everyday life alienable, with meme proliferation serving as an ideal behaviour within data rentierism. As a prolific generator of immediate and durational engagement, parlayed by platforms as data, and again into value, the meme, when emerging from a rentierised model, is always-already a commodity form. Thus, though meme economics was originally conceived of as play, its emergence can be parsed as freighted with significance, stipulating that the internet meme is symbolic of the collapse between markets and media ubiquity.

An Apology to the Meme Economists

A sure-fire way of desiccating all humour from a joke is to analyse, and then explain away the dynamics of the set-up. Truly, I am no fun at parties anymore and extend my apologies to the r/memeeconomy community for picking apart their largely ludic cultural practice and reaching a somewhat gloomy conclusion. Yet I do so because I think their conceptualisations of memes pertinent, and that their perspectives give rise to further interesting lines of enquiry. In particular, the dynamics of the meme cycle they identified – as a "hyper-memetic logic" (Shifman, 2013a, p. 413) wedded as it is in the anticipation of proliferation – provides food for thought as to what the consequences of inhabiting a techno-social condition this sort might be. What does it mean to always anticipate the meme – or to negotiate a terrain in which all gestures may become proliferated, recusing into persistent folds of *telematic excess*?

One consequence can be described through Jodi Dean's (2005) notion of *foreclosure* – the depoliticising effects of privatising activities under the auspices of the aforementioned communicative capitalism. A similar diagnosis has been articulated in some depth by contemporary philosopher Byung-Chul Han in his 2015 book *The Burnout Society*. In this work, Han described the social habituation of extractive, medial foreclosure as a paradigm he terms a *society of positivity*. For Han, there is a frictionless, internetworked arrangement of platformised, communicative capitalism, where every interaction – explicit or implicit – and every non-interaction is reified and captured as datapoint. Furthermore, interactions are *anticipated* as being mediated and thus reified. This produces conditions where "[any] form of negativity is removed" (p. 31). For clarity, this reference to negativity pertains to alterity; with Han essentially claiming that the totalising effects of capitalism realised through the ubiquity of "user-friendly" media have rendered alterity impossible. Akin to Dean's diagnosis of communicative capitalism, a "positive dialectic" then reification of all gestures, whatever the intent, and however passively issued, as an alienable thing, through its inevitable rasterisation as data.

Additionally, and echoing Dean, the *positive dialectic* represents a condition where determining capital forces are able to continue to insist on their constituting emergences, being that they become the

infrastructures: the intermediaries that enable the business of everyday life. In this context, the reification of the meme operates in Marxist terms, becoming representative of the technologised means through which labour is divorced from value. And moreover, through habituating the medial memetic gestures afforded by platforms while underwriting the value of platforms through proliferation, the meme can be understood as a co-constituted cultural practice where the instantiation of digital media ubiquity configured as a rentier model delivered by platformisation becomes entrenched.

To be clear, to point out the above is not to suggest a hagiography of previous media paradigms. Rather, the development of a framework within which the internet meme – an iteration of the meme made distinct by it being uncoupleable from the internet as a complex array of technologies mediating the social – can be meaningfully parsed is also intended to add clarity to the configuration of the techno-social that animates the internet meme. That is, that as an aperture, internet meme, like all memes, disclose their conditions of emergence. Additionally, this is not a fully damning indictment of the techno-social milieu being theorised. Indeed, it should be interpreted, as Dean put it in a podcast appearance, that theoretical perspective on the contemporary medial conditions need to be suitably dialectic (Belden, 2021). For digital fora have and do allow for valued and important community activities to be engaged in – whether these are between minority groups among the general public, fandoms, friends, or peers – for the purpose of networking, in levity, in the interests of mutual support (Weng, 2014; Gal, 2020; Breheny, 2017). The claim here is not that ubiquitous mediation precludes participants from engaging in interactions that are novel and constructive. Rather, it is suggested that the techno-social conditions described in this chapter a rerouting of capital power achieved through the privatisation of media.

The conditions of emergence characterised by financialised media ubiquity must be understood as bearing significance to the proliferation of memes, since these techno-social arrays are entirely constative of the *constituting* meme emergences brought forth from them. Locating internet memes as an aperture through which a paradigm of rentier, platformised media ubiquity can be glimpsed, does not deny the moments of

joy, humour, collaboration, or support meme have enabled, as much as it recognises the harms, harassment, and instances of ill intent they have produced. More, I am suggesting that it is through memes that the conditions producing all these effects can be recognised, with memes recognised a phenomenon co-constituted by the technical and social acting in contingent relation. In a condition of media ubiquity, which is operationalised through rentierism and arbitered through digital platforms requiring proliferation for their economic viability, the proliferate meme becomes recognisable less as an emergent class of digital artefact replete with utility, and more as a perfect expression of the conditions that realise them. And in the context of this chapter, such a view apprehends memes as perfect expression of capital.

Conclusion

In this chapter, I have articulated why internet memes that emerged in the techno-social conditions present in the U.S. in the late 2010s are implicated as commodity forms that benefit from political economic readings while simultaneously serving as an aperture through which the financialised technical arrays extant to this era can be analysed. Late 2010s internet memes, in the context examined, are examples *par excellence* of financialised logics – and specifically of rentierism and platformisation leveraged through the pursuance of social interactions contingent on privatised technics. The romantic in me makes this observation with pathos. In all the variety of forms a meme takes on, and with all the capricious propensity for utility they demonstrate, their mediatic constitution bounds them to a paradigm that is predominantly extractive. These internet memes seem to represent a comprehensive privatisation of the social – with the foreclosure of the internet meme indicative of the ubiquitous financialisation.

To develop this perspective in this chapter, I have characterised and put into broad context the political economic tendencies of rentierised media ubiquity, and given consideration to these dynamics in relation to memes, as proliferate phenomena always implicated in and constitutive to the techno-social conditions from which it emerges. To elucidate this position further, I have detailed the market moves of GIPHY as indicative of how these conditions render memes – the creation of and their materialised forms – commodities that have a distinct relation to the political economic paradigm of rentierism, leveraged through a privatised internet.

Though the shockwaves of the aftermath of the 2016 U.S. presidential election largely saw internet memes (understandably) debated in terms of "weaponised" vernacular, these febrile events were (in many ways) I argue, a clarifying aperture through which meme proliferation was revealed as co-constituted by a political economic backdrop of rentierist, platformised, communicative capitalism. Self-reflexive of this dynamic were the "meme economists" who developed discourses in which internet memes and their anticipation themselves became central to an internet meme corpus. Moreover, in anticipating the proliferation of memes, and ascribing "value" to meme instances tracked against their expected movement through the life cycle, meme cycle, "meme economy" discourses recognised the imperative for proliferation that was inherent to the techno-social conditions being experienced. In questioning the significance of living under such auspices, I return to Jodi Dean's communicative capitalism (2009) and the entrenchment of a positive dialectic (Han, 2015) and that rentierised platforms within the context of media ubiquity bring forth conditions of foreclosure.

What has been accounted for in this chapter was not an inevitable outcome, but instead was contingently precipitated by a constellation of factors, some discussed earlier in this work, and many more that were not. Memes, as they proliferate, are co-constituted by the recent and deep technical media histories, realised and reified in the contemporaneous moment by media technologies in use by people: platforms as interfaces atop hardware and software punctuating across global infrastructures of wires and cabling, servers, and refrigeration units. The reification of internet memes as a resource is a process enabled by the extraction of natural resources – metals, minerals, and petrochemicals extracted by people from the ground – and powered by electricity in huge quantities, day after day, increasing in scale, complexity, and waste all the while. In this context, the meme is representative of the impossibility of a world in which

resources are finite, while proliferation has become the means of entrenching power. It is here that the internet meme takes on further meaning still – as the exhaust of an unsustainable techno-social configuration.

The meme will continue to iterate of course, always transforming as it proliferates. Thus, we might also expect that at a future point, it will serve as an aperture into a techno-social form, reconfigured once more. I expect that the conditions of existences that future memes may reveal will be very different to those present at the time of writing, considering the pragmatic unviability of a techno-situation predicated on the extraction of natural resources (hydrocarbons, rare earth minerals, and human labour) and the demeaning recuperation and concomitant reconfiguration of the business of being alive. A time will come when the cost-benefit of extraction in the service of communicative capitalism becomes unviable – that is, unprofitable – at which point memes will be reconfigured again. Let us wish for memes to reveal, in all their expressive brilliance, a more equitable techno-social condition in which the vitality of sociality is recognised, not as a resource, but as irreducible from the experience of being human.

Thesis Conclusion

A Reconciliation, of Sorts

In this thesis I have argued that internet memes become recognisable *as memes* in respect to the ontological configuration – of asynchronously materialised instances, aggregating into corpuses – they unfold into as they proliferate. As such, proliferation is asserted to be the *thisness* of the internet meme. Couched so, attempts to provide concrete definitions of the internet meme in respect to particular aesthetic or affective attributes, form or function – a memes' *quiddity*, or *whatness* – would be a contradiction in terms; because those characteristics are always contingently realised. In the most concise way possible, this thesis argues that the internet memes' *thisness* guarantees them a variable *whatness*.

Central to this premise is the observation that collective singular internet memes become apprehensible as such and confer meaning by virtue of how they spread; as accumulating numbers of individuated *internet meme instances* accrete into legible corpuses. Within this dynamic, the new meme instances contributed convey or infer meaning both incrementally and by serving to consolidate and render the meme corpus legible. To make this contention, I first synthesised the thinking of Shifman (2013a) and Milner (2013a) who had both identified the importance of reproduction and remix in both the spread of internet memes and their vernacular function. Drawing on the work of Limor Shifman (2013a), I suggested that the meme-as-concept – a form of shared idea – becomes recognisable as such due to its specific ontological composition: namely, that a meme becomes recognised as a meme when it is comprised of multiple *meme instances* that bear signs of modification and remix. Importantly, these modifications – the manner of a meme's proliferation – can occur across the content-form-stance typology set out by Shifman, which in turn is supplied with discursive utility: for to remain legible as an iteration of the wider meme corpus, a new meme instance of. This communicative utility is achieved through the inclusion of fixity and novelty in meme production developed by Ryan Milner (2013a) and restated here to place emphasis on the role of

technics in the realisation of memetic discourses, made evident in respect to the types of proliferation technics afford. Noting that internet memes become communicative by virtue of how they spread, I suggest the term *proliferation* to describe the process that makes both conceptual and ontological sense of the internet meme. Memes proliferate.

When internet memes are understood as proliferate, their emergence through the social use of internet technics is stressed – given that the affordances of internet technics must be accounted for in the aesthetic and affective attributes of the meme forms materialised. Indeed, the media materialist view inherent to this thesis' perspective stems from the rather prosaic observation that to create an internet meme instance, and thereafter contribute to an internet meme corpus, technical apparatus must be used. The use of internet technics – which are understood as assemblages of technologies which a user operates through a digital device and interface – when proliferating internet memes has consequences for the instances and corpuses that are brought forth.

Noting that proliferation is contingent on technics, I synthesised this emergent perspective with the thinking of Olga Goriunova (2013) and Bernard Stiegler (2010) in order to argue that the individuated internet meme instances that go on to be consolidated into legible meme corpuses do so in ways co-constituted by the use of (internet) technics. This point is important to hold on to, given that the conditions of emergence from which internet memes materialise are implicated as preconditions for their consolidation, use, and parsing as vernacular. Therefore, while this thesis recognises that internet memes certainly function as vernacular, it also looks to better understand how technics are implicated in their utility as such. This perspective is proffered as a corrective, of sorts, based on my contention that the medial materialism of internet memes has been somewhat under-explored in internet meme scholarship, in favour of assessments of the internet meme's vernacular utilities. Notably, considering the technicity of internet memes by no means undermines the valuable considerations of their vernacularity. Rather, it sought to add context as to how and why internet memes have vernacular utility, given that their

materialisation as afforded by internet technics must be understood as preconditions to their consolidation into vernacular.

It is in response to this dynamic that I have argued that internet memes emerge as a *gramme* – as exteriorisations of the social use of internet technics – upstream of their consolidation as vernacular. As digital artefacts materialised online, internet memes are imbued with medial properties, including reproducibility, persistence, retention, and observability, which were necessary preconditions to their sorting into *folk taxonomies* and their institution as internet *lingua franca*. Which is to say that technics and their use in social practices both preconditioned the emergence of memes as vernacular, and informed the specific ways by which internet memes broker communications as vernacular. As such, the use of a platform, or editing software to create a meme, which may impart certain aesthetic or affective qualities upon memes – which in turn may inform the utility of a meme within communicative social practices and their significances within social milieux – is consolidated as vernacular downstream of proliferation being materialised through the use of internet technics. Put otherwise, internet technics are not incidental to the creation of internet memes, but rather co-constitutive, to their particular forms and functions, and of course through contouring and realising the social fora in which internet memes broker and cultivate significances.

Somewhat provocatively, noting that proliferation – as the *thisness* of a meme – begets its *whatness*, makes available a framework through which other phenomena might be recovered as memes. Indeed, this work I have deployed historicisation as a method by which "memes" might be identified in antecedent and adjacent contexts. This has not been a deferment to the originary concept of memetics – the conceptual problems of which were drawn out in the introductory chapter. For reasons recounted in the introduction, the theoretical proposition of 1970's memetics – meme theory in its inaugural form – could not evidence or establish itself as a useful heuristic precisely because it argues for what I push back against. Memeticists contended that memes should be apprehended as a discrete "unit", without recognising the ontological relationship between each meme increment and corpus, and in not doing, not

recognising that memes are mediated through the use of technics. In contrast, this work instead claims and given meme "unit" – or instance – cannot be fully apprehended in isolation, as they are only consolidated as memes when read in association with an ontological configuration that makes them legible as such. Indeed, attending to proliferation when considering memes, internet or otherwise, redresses a conceptual failure present in "classic" memetics; the lack of attention paid to technical mediation – that is, how forms of cultural evolution are made possible through the use of technics, and the bearing the use of technics has on the ongoing process of cultural evolution. Acknowledging, through the work of Bernard Stiegler (2010), that there is no "culture", no social arena *a priori* of technics – as noted by Kember and Zylinska (2012) the *social is always mediated* – the constitutive role that technics plays in the bringing forth of memes, as instrumental as technics are to the memes' *thisness and* their *whatness*, must be accounted for. Doing so allows attention to be paid both to the forms and functions certain meme types take on, and how any given meme type is afforded at all.

Furthermore, in evincing that memes emerge variously and contingently in ways irreducible from and reflective of their techno-social conditions of emergence, I have argued that the conceptualisation of the meme developed in this thesis resonates with Sarah Kember and Joanna Zylinksa's notion of *cutting* (2012) – with a meme instance readable as a moment of exposure into a medial flow. When understood as being techno-socially co-constituted, memes can function as apertures, or analytic devices, via which their conditions of emergence can be recovered. Indeed, it is in apprehending memes as *cuts* that I have also applied and evidenced the utility of my proposed framing in developing this thesis as a techno-social history. In addressing both internet and "precursors" memes as *cuts* that are considered on their own terms as memes, internet or otherwise, while also revealing qualities about the techno-social conditions of emergence from which they emerged. In selecting case studies from the mid-20th century United States, up until the late-2010s, the *auts* into the evolving technical and social arrays that emerged over the course of just over 50 years also serve as insights into a genealogy of U.S.-centric hyperindustrialisation, as told through the materialisation of memes. This historical backdrop also has salience to the political economic reading of meme proliferation that has emerged in Chapter Five. Implicitly then, the historic examples considered in the early chapters of this work have been purposefully, retroactively considered as memes

in order to validate the notion that the meme is a historically rooted phenomena, both as a method to evince this thesis' materialist claim that specific meme emergences emerge from contingent techno-social conditions, while also serving to bring into relief the principal subject of this research: the internet meme.

In all, the thesis sought to draw the internet meme into relief by broadening the scope through which "memes" might be understood as a means by which "internet memes" can be addressed with renewed focus. As signifiers and arbiters of meanings and cultural knowledge, internet memes are consequential to the unfolding of life experiences. I acknowledge that this stance rather complicates internet meme scholarship by implying that the "internet meme" is a specific meme type, and a child to the broader phenomenological parent category of "meme"; which in turn insinuates that the latter must be reconciled with before the former can be fully theorised. This work seeks to engage with these points of tension, and indeed move to reconcile the internet meme with the meme, by orienting the definition of a meme internet or otherwise - around proliferation, and thereby finding some common ground between this contemporary phenomenon and its antecedents. I made this case by first recalling the history of the meme-as-concept in the introduction - from its inauguration to its usage in contemporary discourses. In revisiting and problematising the coinage and notion of the meme by Richard Dawkins' in 1976, as well as subsequent theoretical perspectives by memeticists that advanced the notion of memes as "units of culture" I recounted the longstanding ontological problem present and argued about within the formulations of the 20th century memeticists; namely quite what a meme should be properly considered to be. The memeticists failed to either convincingly define the meme as a concept, metric, or heuristic – which presented subsequent internet meme scholars with some conceptual baggage to attempt to reconcile with when attempting to pin down quite what an internet mem might be considered to be. While noting the depths of the impasse encountered by the memeticists, and the theoretical wrangling this inspired by internet meme scholars, I suggest that a return to these conceptual struggles serves as a productive exercise, for it provokes questions of how, if at all, the memeticists' memes and internet memes are alike, and how they may be differentiated. My response to this is that the ontological configuration of memes, and the technical mediation prerequisite for a meme's ontological unfolding is what makes memes, internet or otherwise, of a kind – while at the same time ensuring their aesthetic and

affective differentiations. Understanding a meme in terms of proliferation removes the requirement for memes to be identified in terms of what they look like, or what they do, and instead requests that they are identified – and become communicative – by virtue of how they spread.

After setting out my stall in the thesis introduction, Chapter One developed the claims put forward by revisiting the Kennedy Assassination of 1963 and its associated discourses, which I reconsidered as a meme. Paying particular attention to two artefacts and their modified reproductions that proliferated in the wake of the event – Mary Moorman's Polaroid photograph of Kennedy's death, and the infamous home-movie footage shot by Abraham Zapruder – I noted the specific way in which new iterations of these artefacts were brought forth, and therefore the manner by which this memetic emergence spread – and to what effects. The ambition here was to pay attention to the specific techno-social contexts in which proliferation occurred – be that through "official" judicial and broadcast media discourses as well as alternative participatory networks of buffs communicating by newsletters, phones, and 'zines.

More, I proposed that the Moorman and Zapruder materials and their reproductions, considered as memes comprised of meme instances, were imbued with distinct medial qualities brought forth by the conditions in which they emerged, and in being so, had distinct cultural effects; specifically, adding to the epistemic confusion and erosion of public trust in the event narrative and by implication institutions, cultivated by this event. Additionally, I noted that that the *material locatedness* these artefacts had to the scene of the crime of the century meant that the Moorman and Zapruder imagery were expected to disclose truth claims about the nature of the assassination. However, the case studies I produce suggest that these materials had their truth claims abjured, due to the proliferating reproductions in circulation being explicitly recognised as having been modified, and therefore compromised. Therefore, as well as furthering the claim that the meme is a historic phenomenon that can be retroactively identified and theorised, the story of the Moorman and Zapruder materials recovered as part of the Kennedy Assassination meme point to a moment in which proliferation itself became stipulated as process via which meaning can be made, or eroded.

The proliferation of memes within a historic context was further explored in Chapter Two, though the history of Discordianism and its propagation from mid-20th century distributed participatory networks of alt media and into Erisian hyperspace by the dawn of the Millennium. Recovered as meme, the consideration of Discordianism's proliferation paid attention to how media technics as used within social milieu contingently produce both affective and aesthetic affects. In respect to Discordianism's early proliferation across alt media networks, I noted how the memetic emergences were imbued with a form and function that took an oppositional stance to mainstream media production. It is in respect to this that memes are liable to possess a political economic dimension should the techno-social conditions from which they emerge be financialised. Discordianism is interesting in this regard since it was conceived of to oppose mainstream commodity culture by engaging in media detournements which disrupted consensus realities. Yet, as this chapter documents, over time this meme was to be proliferated across formations of more mainstream media – literary publishing, popular music, theatrical productions, before going on to influence hackers and the Copyleft ethos within Free Software Movement. As this chapter concluded, I suggested that the aesthetics of disruption symbolised by the Discordian writer Robert Anton Wilson also had an influence on Silicon Valley cyberculture in the imperative to entrench distributed computer mediated communications and the "setting free" of information. However, I was careful to note that the ethos of Discordianism could not be realised amid increasing media ubiquity, since that technical milieu was concomitantly becoming privatised. Instead, I suggest, the dawn of the internet age saw the impetus of the Discordian meme recuperated, since within the context of a privatising internet, and this the privatisation of the social practices made available therein, the proliferation of discord, i.e., use of platforms, is recuperated as a commodity form in service of capital - setting up a proposition explored further in Chapter Five.

In Chapter Three, I considered two early web phenomena articulated as early internet memes; Ong Hat and Polybius, both of which existed in cultural milieu before being proliferated online. This makes them useful case studies for testing out the snappy aphorism I have playfully included in this thesis: that the internet meme is a meme that proliferates on the internet. At the same time, Chapter Three sought to emphasise the ways in which that claim in deeply complicated, given the complexity of the internet as (an assembly of) technics and the myriad social practices it affords. That the techno-social contexts in which the internet is implicated brings forth memes in non-deterministic and ever-changing ways, to distinct effects, by framing how the internet affords proliferation calls into question how this assemblage of technics becomes co-constitutive to this social practice.

Chapter Three therefore also introduced the specific consideration of how the technics of the internet make internet memes distinct, and to what effects. This drew into focus media affordances of the early web, specifically those available on message boards, Usenet, personal websites and blogs. In noting that the proliferation of an (early) internet meme was afforded by its concomitant milieu, I suggested that internet meme proliferation is rendered distinct due to the unprecedented programmability of digital media (Manovich, 2002). The digitality of internet afforded proliferation must be understood as undergirding a number of distinct effects, including the scale and speed of distributed participatory cultures afforded (Jenkins, 2012), the persistence of media afforded by the retention of memes as records committed to tertiary memory (Stiegler, 1998). Indeed, that the internet meme proliferated and became captured as record by the same act of bringing forth has made it easier to analyse internet memes due to their comparative availability. So, while this chapter sought to make clear that internet memes are distinct, it wished to do so by suggesting that their very emergences require attention to be paid to media. And in making this point in respect to early internet memes, this chapter argued that internet memes too will continue to iterate over time and in respect to the tecno-social contexts that continue to develop.

Chapter Four further developed this theme and covers case studies of what we might call the *internet meme proper* – those artefacts widely recognised as internet memes in broad public and scholarly imaginaries. Noting that internet memes have been subject to a broad range of theoretical approaches, particularly since the 2010s, this chapter sees me place my own contribution within this extant field – and posited that considering memes in respect to their contingent emergence from techno-social arrays will itself have a bearing on how internet memes are intuited within milieus. In reconsidering the emergence of the "vernacular turn" within internet meme scholarship of the last decade, I utilised the techno-social

historical perspective advanced in this thesis to this moment in meme history, suggesting that the vernacular turn was itself cultivated by the distinct mediality of the internet meme – that is, the internet meme's techno-social conditions emergence.

This observation was made through drawing on perspectives from Bernard Stiegler – particularly the notion of grammatisation (2010) and the composition and generation of tertiary memory. In essence, I argued that the techno-social conditions in which grammatisation of the internet meme could take place must be accounted in relation to any vernacular usages that consolidated, and therein any analyses of the internet memes' communicative function as vernacular, given that its codification as such was itself, contingent on technics. Once more, the thinking of Olga Goriunova (2013) was invoked to elucidate this claim, particularly in respect to the ways in which platform affordances have a significant, if underappreciated bearing on the aesthetic and affective attributes of memes utilised in online discourses. In turn, this perspective was advanced to make apparent the constative relationship an assemblage of contingent interplays between the technical and the social may have on contemporary life.

This point was emphasised in relation to the two case studies explored in this chapter, delivered as techno-social histories of the Image Macro and GIF memes. Recovering their trajectories towards emergence, I aimed to make clear how interplays between technical and social conditions imbued these internet memes with distinct aesthetic and affective attributes – in perhaps unseen, obscured, or lesser-recognised ways. At the same time, in positioning these case studies as *cuts*, I advanced the claim that the aesthetic and affective attributes of these internet memes are distinctly *of the internet*, due to the internet's technicity, and forms of sociality it affords. Of course, in selecting just two (broad) examples of myriad internet meme types, the case studies in this section were intended to proxy for other internet meme instances, each of which are materialised as a consequence of the technics of the internet animating social practices. In proposing that these internet memes have emerged as a result of a range of contingent social and technical circumstances, these examples as *cuts* serve to expound how meme formats common to

meme vernaculars have encoded within them technical and social developments realised in corollary with iterating internet technics.

Finally, Chapter Five considered what the perspective developed in this thesis revealed about the internet memes, and their techno-social conditions of emergence, proliferating in recent history. This involved a consideration of meme proliferation occurring across and from an assemblage of internet technologies and social milieux that can be characterised as privatised. This perspective was developed by advancing a Marxist-informed critique, synthesised in reference to concepts of media ubiquity (Deuze, 2011) platform capitalism (Srnicek, 2017) and rentierism (Christophers, 2020, Dean 2022). In doing so, the U.S.-centric techno-social history composed is rendered further pertinent, given the outsized political, geographical, economic, and cultural influence, the internet technics and social practices cultivated therein have had upon global cultures in recent decades. This cultivation has been facilitated by extraction of resources, geological and human, into networked infrastructures and praxes which over the course of decades have rerouted material, informatic, affective, communicative, political, and fiscal flows. It is in and through these rerouted relations that the internet meme exists; or rather, the existence of the internet meme is made possible.

This dynamic was evinced in reference to GIPHY – a platform which located itself as a cataloguer, producer, and distributer of GIFs. Noting that, while free at the point of use, GIPHY's business model was tied to its ongoing usage by internet users. Which is to say that users "paid" for the use of GIPHY's service with their data. I proposed that the model aggressively furthered by GIPHY, in making itself available for incorporation within other major communication platforms, through engaging in GIF boosterism, should be considered rentierist. That is, that GIPHY's business model was built upon controlling access to the GIF which it had captured as a resource, with the asset of user data gained through the provision of access that which determines GIPHY's market valuation. Framing GIPHY in this way allowed me to introduce an explicit political economic reading of internet memes, in which I

argued that in being co-constituted by a largely privatised and financialised techno-social array, internet memes can be understood as alienable.

It is through the concept of rentierism that a memetic phenomenon that emerged during 2016's U.S. election cycle is reconsidered: so-called "meme magic". In reference to "meme magic", I suggest that the epistemic effects leveraged by its practitioners were well explicated in relation to the techno-social context in which they were operating. As a counterpoint, I recalled the recursive "meme economy" meme which saw participants anticipate and deliberate over a memes anticipated proliferation (and eventual crash) pantomiming mock financial trader language as they humorously engaged with memes as abstracted commodity forms. Taking note of the ways in which this community apprehended internet memes, I suggested that the assessments of the meme economists were astute, recognising as they did, the inherent commodity form realised and represented through the proliferation of memes.

To conclude Chapter Five, I argued that proliferation not only benefited the platform through the cultivation of use, parlayed as data and into an asset value, but also served to help these private technologies insist upon their ongoing use, as central as they were to the enablement of certain public facing discourses. Drawing on the work of Jodi Dean (2005) and Byung-Chul Han (2018), I suggested that the privatisation and rentier modelling of those technologies that enable many social practices, including the proliferation of memes, produces a form of foreclosure – or as Han put it, a "positive dialectic" – in which every interaction is implicitly recuperated in service of capital.

A Techno-Social History, a Techno-Social Future

The techno-social history developed and mobilised in this thesis has sought to attend to, and moreover productively engage with, the meme. I have done this by apprehending the meme, and specific meme forms, in respect to the manner in which they emerge – a process, having synthesised a number of

theoretical perspectives, I have termed *proliferation*. In attending to both how memes proliferate, in ways contingent on their conditions of emergence, the rubric this thesis advances demands attention be paid to the technics; that is, technics as used in the proliferation of memes within social contexts. I have made this claim having argued when proliferation is acknowledged as the *thisness* of the meme, then technics as used in social practices must be recognised as utterly constitutive both to the aesthetic and affective attributes memes are imbued with, and the significances meme have within life-worlds. In making this case, I have suggested that the meme as phenomenon should not be apprehended as a definite article, but instead that which is brought forth through proliferation as it occurs within ontological contingencies of techno-social milieus: that is, that memes have an ontology that is intrinsic to both their *thisness*, and their *whatness*.

As well as developing this rubric, I have put it to work. In this regard, the historical account of memes I have provided both evinces my formulation, and demonstrates what its application can reveal. In addressing memes – both internet and "precursors" – as *cuts*, or moments of exposure of the technosocial flow understood as a form of *gramme*, I have sought to demonstrate how memes emerge contingently. Concomitantly, in paying attention to the conditions of emergence present within the historical moments addressed, I have brought into relief some specific ways internet memes are materialised, and considered some significances thereafter. As such, by attending to the techno-social histories of meme emergences, my aim is to improve both how the meme-as-concept is understood, and the distinct characteristics and significances of the internet meme possesses and discloses.

Truly, to say that internet memes *are memes that proliferate on the internet* is not as glib a point as it may seem: Instead, it speaks to and serves to further the necessary critiques which concern how the internet – itself an evolving technical assemblage – plays a constituting role in day-to-day life. Analysed in this work as a social technology comprised of an assemblage of technologies (while the wider function of internet as a technology is certainly acknowledged), the meme-as-concept, and specific meme instances, can disclose much about the conditions of the contemporary moment; allowing close or thematic readings in turn. In respect to the concern explored in this thesis in particular (for indeed, there is much else that can be recovered beyond the scope of my analysis), the perspective I have explored how a number of technical changes that have occurred during the intensification of hyperindustrialisation – that is, from the analogue, broadcast model of mid-20th century to the digitally networked, platformised, increasingly financialised environment, of the 21st century, have served as contingent context for meme proliferation, within which moments of inflection, of greater or lesser import, have altered, rerouted, and otherwise contoured the memes that emerged, and have even influenced how in internet memes are held in cultural memories. By the formulation advanced then, which already acknowledges the continual and contingent iteration of techno-social milieus has built into it scope for the assessment of memes yet to come.

At the time of writing, there is intent in some quarters to develop techno-society calibrated through Web3; typified perhaps by *metaverse*-like form of experience championed by big tech organisations, whose viabilities are tallied against the uptake of their services. If these mediated life-worlds are ever realised, internet memes – should such the qualifier "internet" be appropriate in what may unfold as an all-encompassing context – will of course be subject to evolving and reconfiguring forms proliferation, supplied with new significances, and co-constituted by affiliated political economic dynamics. Of course, the emergence of future internet memes will be contingent on the technics and economic model of the internet becoming viable in the long-term – and thus not predicated on the wanton extraction of human and natural resources; a sea change that at the time of writing, show little promise of arriving. If the techno-sociality contingent on the internet is not reformed in the 2020s, then I rather suspect that future memes will be proliferated in clay, cloth, and customs, rather than code. But let us hope otherwise – and moreover participate in whatever way we can to cultivate a techno-social futures that has respect for human experience and the natural world baked into its constitution. In any case, I warrant the meme will persist as co-constituted by, and therefore, as *auts*, apertures into, their techno-social conditions of emergence.

Appendix One

November 22, 1963

12.29pm: The motorcade enters Dealey Plaza

Democratic incumbent John F. Kennedy has been in Dallas, Texas, as his administration begins to prepare for the 1964 U.S. presidential election. Keen to win over voters in a state hostile to his presidency, Kennedy is wooing crowds as he travels in his motorcade through the city, meeting with local business leaders. His wife Jacqueline is sat beside him in the open-topped presidential Lincoln limousine, with Texas Governor John Connally and his wife Nellie in jump seats one row in front. A secret service agent sits beside the driver, and the vehicle is flanked by a security detail. The motorcade enters Dealey Plaza from Elm Street at 12.29pm ET, and Abraham Zapruder starts filming the motorcade on his home movie camera.

12.30pm: Kennedy is assassinated

A few seconds after the motorcade enters Dealey Plaza, gunfire begins to ring out. Both President Kennedy and Governor Connolly react in pain. They are alive, but injured, with a seated Kennedy raising his clenched fists to his throat, and Connolly falling into his wife's lap. Moments later, Kennedy suffers a fatal gunshot to the head. The limousine speeds away to the nearby Parkland Hospital. According to the official account of the assassination, presumed assassin Lee Harvey Oswald has fired three shots from a sixth-floor window of the Texas School Book Depository. His first shot misses. His second shot hits Kennedy in the neck and Governor Connally in the torso. His third shot hits President Kennedy in the head, just as Mary Moorman takes a Polaroid photograph.

12.31pm: Oswald is confronted

Patrolman Marrion Baker confronts Texas School Book Depository employee Lee Harvey Oswald in the building's cafeteria, but is not held. Official reports state that Oswald leaves the premises, walks seven blocks, boards a city bus, and eventually gets in a taxi and crosses town.

12.55: Rumours from the grassy knoll

Albert Merriman Smith of UPI, who was riding in the press pool following the motorcade makes reports the following dispatch from a car phone: "Some of the Secret Service agents thought the gunfire was from an automatic weapon fired to the right rear of the president's car, probably from a grassy knoll to which police rushed."

1pm: Kennedy dies in Parkland hospital

After being treated by doctors without success, the President, who arrived 'moribund', has his last rites administered by a priest, before being pronounced dead.

1.15pm: Officer J.D. Tippit killed

Police officer J. D. Tippit is presumed to have spotted Oswald in Oak Cliff, Dallas. Tippet is reputed to have pulled up alongside Oswald and exchanged words, before stepping out of his car. In doing so, Tippit is shot three times in the chest and once in the temple. Twelve people witness a man fleeing the scene, with six later identifying the killer as Oswald in police line-ups.

1.22pm: A rifle is found, along with three spent cartridges

Police find a recently-fired Carcano Model 1891/38 rifle and empty cartridges behind a stack of books on the sixth Floor of the Texas School Book Depository building. The location becomes known as the "sniper's nest" from where it is presumed the assassin took aim.

1.30pm: Oswald hides in the Texas Theatre

Oswald sneaks into the Texas Theatre without paying, and takes a seat for the film War is Hell.

1.33pm: Kennedy's death is announced

The assistant White House press secretary announces the president's death, which the press reports in real time.

1.38pm: Walter Cronkite announces Kennedy's death on CBS News

"From Dallas, Texas, the flash – apparently official – President Kennedy died at 1:00pm Central standard time, 2pm Eastern standard time, some 38 minutes ago."

1.45pm: Oswald is arrested

After being tipped off about Oswald's whereabouts, 15 police officers surround the Texas Theater. Oswald is arrested inside, while loudly protesting his innocence. He is reported to custody at 1.51pm.

2.10pm: Abraham Zapruder appeared in a live television interview

Commenting to his interviewer, Zapruder describes his experience of filming the assassination:

And as I was shooting, as the President was coming down from Houston Street making his turn, it was about a half-way down there, I heard a shot, and he slumped to the side, like this. Then I heard another shot or two, I couldn't say it was one or two, and I saw his head practically open up, all blood and everything, and I kept on shooting...

2.30pm: Oswald is questioned

Oswald undergoes almost 12 hours of questioning, continually asserting his innocence regarding both the murder or Tippet and the assassination of Kennedy.

Approx. 4pm: Mary Moorman appears in a recorded television interview

Moorman is interviewed by Bill Lord of ABC/WFAA during the afternoon, recounting her recollection of the assassination:

Bill Lord: Did you realize what had happened when you heard the shots?

Mary Moorman: No, I didn't. There was, oh, three or four real close together and it was, uh, it must have been the first one that shot him because that's when I, that was the time I took the picture, and during that time, after I took the picture, and the shots were still being fired, I decided I'd better get on the ground.

BL: Did people lie down on the ground?

MM: Uh, I just know about myself and the ones right close to me, and really, I just know about myself.

BL: You did lie down?

MM: I did. We were, I was no more than 15 [feet] from the car and in the line of fire evidently.

7.10pm: Oswald is charged with Tippit's murder, under the indictment 'murder with malice'

11:26pm: Oswald is charged with the murder of President Kennedy

November 24, 1963

12:20pm: Oswald is shot

Oswald had been scheduled to be transferred from police headquarters to the county jail – a process that involves a "perp walk" in front of the media. As Oswald makes his way to the police vehicle, local nightclub owner Jack Ruby emerges from the throngs of news reporters, and shoots Oswald at point blank range. The attack is carried near live on national television. Oswald is transported to Parkland Hospital.

2.20pm: Oswald dies in Parkland Hospital

November 25, 1963

Life magazine purchases rights to Abraham Zapruder's footage.

November 29, 1963

President Lyndon B. Johnson establishes the President's Commission on the Assassination of President Kennedy, known unofficially (and henceforth) as the Warren Commission, with the aim of investigating the assassination of President John F. Kennedy.

November 29. 1963

LIFE magazine publishes 30 non-sequential black and white stills from the Zapruder footage. This is the first time that imagery from the footage is made public. *LIFE* will carefully guard its rights to the footage until the mid-1970s.

September 24, 1964

The Warren Commission concludes and hands over its 888-page final report to President Johnson, before releasing its findings to the public on September 27, 1964. The Commission determines that President Kennedy was assassinated by Lee Harvey Oswald and that Oswald acted entirely alone. It also concludes that Jack Ruby acted alone when he killed Oswald. The Commission's findings and methodology prove controversial, and critics and conspiracy theories proliferate in its wake.

Appendix Two

A Mimeograph, Oh My!

It is of note that the emergence and initial proliferation of Discordianism – its creation and its spread as a cultural phenomenon up until the point it was amplified in the Illuminatus! Trilogy - captured in Chapter Two neatly shares the timeframe with key events within Kennedy Assassination discourses captured in this thesis' the first chapter. The first edition of Kerry Thornley and Greg Hill's Principia Discordia's was created in 1963 - the same year as Kennedy's shooting. Subsequently, the contents and sensibility of the Principia Discordia reached widened audiences in 1975 thanks to its centrality to Robert Anton Wilson and Bob Shea's Illuminatus! Trilogy, which was also the year that Zapruder film was first shown on live TV. There are other synchronous ties to between the assassination and the Principia Discordia too, that I'll note for interest: The Principia was first drafted in 1963, a process which saw Hill and Thornley using a mimeograph in the development of their draft (Robertson, 2012). The mimeograph used was Jim Garrison's (Robertson, 2012). Kerry Thornley was also an acquaintance of Oswald, and was implicated in the assassination of JFK. There is much that is unknown about this. Starting with what is a certainty: Thornley was an acquaintance of Lee Harvey Oswald, having served in the marines alongside Kennedy's presumed assassin in a radar operating unit at Santa Ana MCAS El Toro in 1959. It is also a curious, but undisputed, fact that Thornley has the distinction of being the only person to have written a book about Oswald prior to the assassination of JFK – having penned a novella called The Idle Warriors in 1962, which was inspired by their time spent together. Thornley's complicated (and complicating) backstory either implicates him in the assassination directly, or makes him a remarkable victim of circumstance, depending on your interpretation of events. Some conspiracy buffs are sure of his involvement, proposing he was posing as a "body double" for Oswald on the November 22 1963. These relationships, forged across media arrays, rather than being of material importance was recursively expressed in the ongoing epistemic uncertainly about the Kennedy Assassination and channelled in the Illuminatus! series. Hail Eris, indeed.

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