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Retrospective Technological Mythmaking: Media Discourses of Furby and Artificial Intelligence

Abstract

Recent articles suggesting the late-1990s animatronic children's toy, Furby, was promoted and perceived as true Artificial Intelligence in 1998-99 are not wholly accurate. In examining 130 North American news stories, Furby is often accurately described as only imitating machine learning. This paper analyses these articles from the perspective of mythmaking in technological culture. In the article, I analyse the media discourses at the time and provide their historical context within North American technological culture, containing events such as the Y2K bug, popular media representations, and the dotcom bubble. I also describe several potent emotional reactions to Furby. However, recent media discourses suggest Furby had been perceived as a panic-inducing new technology, similar to the *War of the Worlds* radio broadcast and silent cinema train effect, both of which historians have largely discounted. I contribute evidence to the contrary, while acknowledging emotional reactions, which are not necessarily indicators of utopian or dystopian cultural panics, but instead a technological banal. The contemporary mythmaking about Furby is situated as comparable to Foucault's analysis of myths of Victorian prudishness and silence around sexuality. Retroactive mythmaking risks supporting uncritical perspectives in the present, warranting interrogation of myths about AI as it develops and expands.

Keywords

artificial intelligence; sublime; journalism; media discourse; toys

This paper presents a discourse analysis from a media archaeological perspective, examining news coverage of Furby, a late 1990s robotic children's toy. Recently, media discourse has claimed Furby was misunderstood upon release as possessing artificial intelligence (AI), and that this provoked a cultural panic. This article describes a broader and more heterogenous view. In this paper, I analyse the Furby media coverage of its first two, most popular, years, from the theoretical perspective of technological culture and myths. In examining 130 North American news stories, accurate descriptions of Furby simply imitating machine learning were found to be equally common as inaccurate references to AI.



While refuting the idea of a Furby panic, I describe the climate of technological culture at the time, as well as emotional reactions to Furby, which together provide ingredients for contemporary mythmaking about reactions to Furby as exemplifying an 'AI sublime'. I argue that the 'Furby panic' is a media myth in the making of what was more accurately a case of technological banal. Considering Foucault's analysis of presumed Victorian sexual repression, I argue that retrospective mythmaking can support presentism and uncritical smugness. This can be dangerous during this time of the rapid integration and expansion of actual AI across many realms of our lives. In so doing, this paper contributes to the scholarly history of AI as well as to literature on technological culture and reactions to new technologies.

Technological Culture and Its Myths

In this article, I employ the phrase 'technological culture', as used by cultural studies scholars Jennifer D. Slack and J. MacGregor Wise to avoid the deterministic and agency-deflating tendencies of separating culture and technology. In order to foreground the human agency involved in creating, modifying, and using technologies, we must remember that technologies come from within our own cultures. They are not autonomous, external agents wreaking havoc on human culture. Such a perspective is similar to philosopher Karen Barad's use of the term 'intra-action' to describe elements coming together while within the same system or universe (such as users and technologies within culture). ²

A technological culture perspective examines, not only material devices and infrastructures, but also the discursive myths and narratives about them. Sturken and Thomas argue that technological metaphors are constitutive in how they can influence technologies' uses. They assert that, 'technological development is one of the primary sites through which we can chart the desires and concerns of a given social context and the preoccupations of particular moments in history'. However, I wish to extend this perspective to make explicit that discursive constitution does not apply solely to new media and emergent technologies. As several scholars have demonstrated, despite emphases on the newness of new media, technological pasts and presents are in active interplay and intra-action. Acland argues that newness is the dominant myth of media technologies, supporting ideologies of disruption and progress, and attracting the vast majority of research on media use and technology diffusion. He calls for more research into the tenacity of residual media, such as 8-track



audio tapes and VHS video tapes, to shed light on historical processes of accumulation and accommodation, which newness myths of rupture occlude.⁶ Mythmaking, metaphors, and narratives in technological culture are constitutive retroactively as well, as I will discuss later.

Vincent Mosco, in his analysis of myths in technological culture, reminds us that myths are not fallacies, but potent cultural narratives. These can be true or false, but all have the potential for real, material effects. In *The Digital Sublime*, Mosco writes that 'myths are stories that animate individuals and societies by providing paths to transcendence that lift people out of the banality of everyday life. They offer an entrance to another reality, a reality once characterized by the promise of the sublime.'7 This draws upon the works of several technology scholars. Leo Marx, in 1964, wrote of 'the rhetoric of the technological sublime', which positioned American technological progress as part of its overall ideology of exceptionalism as a presumed world leader. David Nye expanded on this concept in American Technological Sublime, including engineering and other technologies. Carey and Quirk, Carolyn Marvin, and other scholars have focused, in turn, on an electrical sublime.⁸ Sublimity here expresses religious-like awe and fear, which drive utopian and dystopian (hereafter referred to as topianism) reactions to technologies. Such sentiments support a sense of divine purpose, which resonates with nations founded on religious principles. Technological accomplishments are signs of national achievement, identity, and prowess. Analyses of technological myths have theorised them as particularly resonant in North America, drawing upon and reinforcing myths of New-World frontiers, Manifest Destiny, and exceptionalism, where they were perceived as such by both natives and visitors.9

Iterations of awe-inspiring technological advances have been used to define historic eras: The Age of the Telegraph / Electricity / Telephone / Radio / TV / Computer / Internet / Web 2.0 and now, arguably, The Age of AI. Mosco describes recurrent, central myths of the revolutionary transformation of culture by technologies as including the transcendence of time ('the end of history'), space ('the end of geography or distance') and power ('the end of politics'). For nations with large geographic expanses, as with the US and Canada, 'the end of space' myth was particularly potent in bridging the distances between persons—whether by railroads, interstate freeways, telegraph cables, telephone lines, or broadcast networks—and an important part of building nationhood and civic subjectivity. ¹⁰

Myths have material effects, particularly when myths of the 'end' of business, nation, power, or other paradigm shifts foreclose critical consideration of those areas now rendered archaic and depoliticised. In an example of this, Mosco describes how the emergence of the new internet economy



was driven by a myth of the end of traditional economics. In this purported paradigm shift, a business venture no longer had to show profits, in the traditional sense, to warrant massive capital investments and high valuation. A catchy idea using the internet and an 'e' prefix was often enough of a business plan. In the US, the state of California earned massive revenue from taxing nascent internet businesses ('dotcoms'). When the e-biz bubble burst, it contributed to a fiscal crisis that led to the recall of California Governor Gray Davis, replaced by actor Arnold Schwarzenegger.

I wish to amend Mosco and the scholars upon which he draws with a temporal dimension. I argue that the creation and mobilisation of technological myths is often a retroactive project. This builds upon the work of several additional media scholars. Grusin's concept of premediation offers a forward-looking temporal dimension in which, accelerated in the United States after the September 11th, 2001 terrorist attacks, pre-emptive mediation presents 'an almost constant, low level of fear or anxiety about another terrorist attack' in order 'to prevent citizens of the global mediasphere from experiencing again the kind of systemic or traumatic shock produced by the events of 9/11.'11 The work of Grusin and others (e.g., Bolton, Manovich, Crary, Doane) 'breathe the spirit of media archeology', a 'travelling discipline without fixed boundaries' described and developed by Elsaesser, in which 'the research is heterogeneous and diverse, (...) the method is deconstructive and nonnormative, and its aims are to be subversive and resistant.'12 The temporal move in media archaeology was to develop a new 'historiographical model (...) in order to overcome the opposition between "old" and "new" media, destabilized in today's media practice.'13 In other words, media archaeology broke from the strict linear temporality of traditional historiography as well as the teleological temporality of progress narratives of media technologies. Erkki Huhtamo's notion of cultural topoi, or recurrent 'stereotypical formula[s]', similarly disrupts the notion of new always replacing old, as does Scott's rejection of the 'newness hypothesis' that associates extreme cultural reactions only with new media. 14 Such temporal fluidity underlies this paper, in which presumed past reactions to media technologies are retroactively deployed in the contemporary constitution of a technological myth.

Mythmakers search for past evidence of sublimity to generate an aura around the cultural impact of technologies. As the adage goes, any story about the past is invariably a story about the present. If AI is amazing, we seek to justify and make our amazement seem rational by comparing it to irrational amazements in the past. Narratives of extreme reactions to the technological sublime in the past serve to constitute present-day users as sane and rational. The model is similar to what



Foucault describes in the 'We "Other" Victorians' and 'The Repressive Hypothesis' sections of *History of Sexuality, Volume One.*¹⁵ Inaccurate depictions of the past as irrational—in his example, perceived Victorian sexual repression—constitute the present as more rational than it actually is. Constituting repression in the past to celebrate liberation in the present encourages a sense of complacency: 'We don't need to interrogate our own sexual hierarchies because we're not those silly old repressed Victorians!' In terms of technological culture, a similar critique has been performed in debunking myths of the panicking audiences who ran away from a silent film of an approaching train and the radio listeners who believed the 1938 *War of the Worlds* dramatization was an actual Martian invasion. ¹⁶ Correcting myths that purport our superiority over past media and technology users helps maintain our critical vigilance in examining and participating in technological culture.

Pre-millennial Technological Culture: 'Dah doo-ay wah!'17

Although I will demonstrate that Furby media coverage was not a true panic, the time of the toy's release was definitely one of intense cultural interest in and emotion around AI. The era provides ingredients for myth-making, if not universally at the time, then retroactively today. The historic context of Furby's release includes the Y2K bug panic, dotcom bubble and bust, and many representations of AI in popular media. In analysing media of the Y2K bug, Best argues that a resurgence of Carey's electrical sublime combined with neoliberalism and globalised media to propel a historic 'global media event'. The media coverage of the potential catastrophes that could be caused by an archaic programming glitch was part of 'global digital networking' discourse. This was, Best argues, 'not due to a misreading of technology and its material capabilities', but part of a discursive process that 'confirmed the value associated with new and networked computer technologies to the emerging global society'. ¹⁸ Analysing the dotcom bubble, Tapia describes how American culture from 1997–2001 was suffused with myths of technology innovators earning millions of dollars, unstoppable stock market gains, generous venture capital investments, and other rags-to-riches narratives (reminiscent of the frontier American Gold Rush). A direct impact of this, Tapia argues, was that tech workers eschewed traditional paths to financial security. Instead of investing in education or working their way up from entry-level jobs in large companies, they assumed they were short-term workers who would quickly make fortunes when their start-up held its initial public offering (IPO) or was sold to a larger company—a strategy that paid off for very few. 19 In the



subsequent 'dotcom bust' from March 2000 to October 2002, the US tech-heavy NASDAQ Composite Index lost over \$5 trillion in market value.²⁰

Media depictions of AI were particularly popular in the 1980s and 1990s, such as the *Terminator* and Robocop films. These depicted AI and automatons in varying degrees of threat, from unsettling dehumanization to malevolent predators, continuing tropes that dated back at least to the robot saboteur and seductress Maria in 1927's Metropolis. Immediately preceding and during the period under examination here, cinema and television saw a genocidal cyborg collective in Star Trek: First Contact (1996), vengeful theme park androids in *The Outsider* (1997), an out-of-control computerized dwelling in *Smart House* (1999), and one of the most famous and influential representations of intelligent machines destroying the world and enslaving humanity, in *The Matrix* (1999). Positive portrayals, such as 1999's Bicentennial Man, also kept AI in the public consciousness. AI was also prominent in current events. The Deep Blue supercomputer from IBM defeated chess champion Garry Kasparov in 1997. Considered 'one of the great accomplishments in the world of artificial intelligence and mathematics', this event generated media coverage that 'provoked considerable thought on the subject of what intelligence is all about'. ²¹ In North American press coverage of Furby, however, more common referents were virtual pets, such as the popular Giga Pets, which also had been produced by Furby's manufacturer, Tiger Electronics. 22 Noted Massachusetts Institute of Technology psychologist and sociologist Sherry Turkle launched a research program into such virtual pets, and would claim that Tamagotchi and Furby were 'socializing our children to think that it's natural to be having conversations with machines, and that it's natural that machines should need nurturance'. 23

Affectations of Artificial Intelligence: 'A Fuzzy Robot that Talks, Learns, and Interacts'²⁴

Tiger Electronics in Vernon Hills, Illinois, had already experienced success with low-end electronic toys, and, in February of 1998, toy manufacturer Hasbro acquired the company for \$335 million. Invented by Dave Hampton, Furby was released in North America on October 2, 1998. Bug-eyed and big-eared, covered in various colours of fluffy fur, and possessing large ears and a beak, these animatronic children's toys could interact with humans and each other using infrared sensors. Detecting people, sounds, and other stimuli (such as pats on their back) triggered programmed responses from the creatures. Furbys spoke their native tongue, 'Furbish', then, increasingly, spoke English, in an imitation of machine learning and AI. Play actions simulated user feedback as the



result of children 'teaching' and Furby 'learning' to speak English. Although not true machine learning, Furby was an impressively effective affect generator or emotional engine, to use the terminology of contemporary AI. This refers to recognising appropriate emotional reactions to external situations and conveying representations of those emotions.²⁶

Furby, however, did the reverse. It expressed emotions ranging from irritation to affection, but this was largely in response to the most basic of perceived stimuli, such as the presence or absence of persons, sounds, or other Furbys. Thus, its actions and reactions were worse than an emotionless robot: they were disconnected, irrational, and hysterical. In turn, such behaviour generated extreme emotions from humans. Furby provoked emotions rather than sensing them. Media coverage of Furby almost always included first- or second-hand descriptions emotional responses to Furby. This was typically irritation, vexation, and suspicion, and often tempered with amusement, rather than panic. Even violence toward Furby had a playful, childlike sadism: Furbys were dissected and their innards 'rather brutally exposed' on the *Furby Autopsy* website, which was covered in media at the time and widely shared by individuals in a proto-viral fashion.²⁷ Parents were described as hiding the toy from children²⁸ and 'put[ting] it into the microwave to shut it up'.²⁹ Around 2000, I attended a costume party at which one attendee wore a full-length coat made of Furby skins.

Furby became a holiday-shopping sensation in the tradition of Cabbage Patch Kids, the must-have toy of the year. Stores sold out in minutes. Resellers charged reportedly up to \$500 for one. Furby was widely covered in prominent North American media outlets, such as *WIRED, Time, USA Today*, and national morning television programs *Today* and *Good Morning America*. The consumer demand was described as a 'Furby invasion' or 'Furby wars' among 'Furby fanatics'. Shoppers trampled by crowds infected with 'Furbyism' sued a Furby retailer. Furby mania' also swept Australia. Much media coverage blamed itself for causing cause the craze. Calling it 'this year's media-anointed Hot Christmas Toy', such expressions of strong media effects were directly in line with previous myths of mass-media power and influence, such as the aforementioned silent-era train effect and *War of the Worlds* panic.

However, emotion is not necessarily topianism, nor are consumers naïve subjects of 'hypodermic needle' media effects. Additional important drivers of the toy's popularity included its low price and interactivity. Retailing at \$34.99 (USD), it was a modest price at the time for an elaborate electronic toy. It was cheaper than other cutting-edge robotic toys, although one needed to buy more than one Furby to experience their interactive play. Furby's gross sales were \$60 million in 1998 and over \$200 million in 1999.³⁷



In subsequent years, the toy spawned spin-offs, such as Furby Babies and Shelbys, revivals, and an attempted film, and it has maintained an active fan base. Its continued popularity has made it a form of residual media as Acland describes, technologies that persist in use and niche popularity despite having been rendered obsolete by newer, more advanced innovations.³⁸

Furby Media Discourses: 1998-1999

This study examines 130 print journalism articles about Furby. This was a purposeful sample, obtained using the Proquest Historical News Papers and Historical Magazines databases. Initially, 1226 full-text articles were found published in English in North America between January 1, 1998, and December 31, 1999. This time range was chosen to assess pre-launch advance coverage, the debut holiday shopping season, reactions to living with Furbys, and attitudes during the follow-up holiday season. Advertisements and press releases were excluded to focus on reactions to, rather than publicity for, Furby. According to myths of new-media disruption and topianism in technological culture, this sample should best reflect reactions to Furbys arrival. From this pool, keyword searches for 'learn', 'learning', 'learns', 'teach', 'speak', and 'understand' were used to identify articles which described Furby as having AI capabilities or the impression of them in its ability to learn and speak English. This resulted in a sample of 130 articles. Across these publications, I asked, How accurate were the discourses around the AI-imitating technology of Furby? Stories were assessed as to whether or not an article inaccurately claimed Furby to have AI capabilities or accurately described its programmed imitation of learning. Inaccuracies relating to other aspects of Furby (e.g., sounds, colours, recording capabilities) were not taken into account; only discourses on AI or machine learning capabilities were assessed. Analysis involved comparing the claims and descriptions of Furbys technology in the sample of articles against a baseline of accuracy compiled from authoritative sources. These included inventor interviews, product descriptions, and technologists' assessments. Although this step identified some misrepresentation, more common was accuracy in descriptions of Furby technology, which I will describe next.

Minor Misreporting: 'Somehow, They Learn'39

Although media coverage of Furby did contain some inaccuracies, it was far more nuanced than a wave of uniform inaccuracies and topian hyperbole. One headline did illustrate the era-defining



technological myth Mosco and others described by asserting that 'Furby [is] Helping Us Enter "Autonomous Agent" Technology Era.'⁴⁰ Most, however, were less sweeping. Some news reports did misrepresent Furby as a 'huggable hunk of artificial intelligence' capable of true machine learning.⁴¹ The *Orlando Sentinel* from Florida stated that 'Furby boasts a basic artificial intelligence and can learn some English'.⁴² The *New York Times* described Furby as 'a fur-covered virtual pet that speaks Furbish, an imaginary language, and English, which it learns as a child interacts with it'.⁴³ Additionally, reports did evidence that some people did believe this, at least in their colloquial descriptions. A reporter for the *Los Angeles Times* described this interaction with Rusty Cook, a middle-aged businessman:

"They have different personalities," he says of Furbys. "And they learn different things from different ones. Once your two Furbys get to interacting, you take one to a neighbour's house and it learns new things, you bring it back home and it teaches the other one."

In layman's terms, I say, just exactly how does it do that?

"I don't know," Cook says.44

This was, however, far more limited in scale than a panic. Additionally, even when misrepresented, the AI affectation of Furby was often cast in a dubious light. Many of these reports used qualifiers. Some articles put quotation marks around words such as 'learn', 'communicate', or 'intelligent' to signify doubt toward the toy's learning capabilities. ⁴⁵ Others used modifying phrases, such as describing Furbys vocabulary as 'limited', ⁴⁶ or the toy having only 'a basic artificial intelligence' consisting of a 'silicon brain' relying on 'crude infrared signals'. ⁴⁸ One reporter, although misunderstanding that Furby 'contains a computer chip that allows it to learn English', spent four weeks with her son's Furby before deciding that the chances of it actually learning English 'was nil'. ⁴⁹

Accuracy in Much Coverage: 'The Gimmick ... Mimics Learning'50

Despite the excitements at the time in technological culture and around AI in particular, most coverage of Furby was accurate in conveying that, 'with the Furby, there is the illusion of artificial intelligence. But it is mostly an illusion'. Several explicitly described how this 'gimmick' worked:



The Furby microprocessor is a low-cost version of the chip that powered the original Apple II. It gathers, prioritizes, and then responds to information. Tiger calls this process "learning."

Furby's (sic) have a vocabulary of more than 200 words. They use only a few words and phrases when initially activated and then gradually access the rest. This is how Furby's (sic) seem to "learn" speech.⁵²

Inventor Hampton clearly described in one profile article how he went about

synchronizing the computer chips, sensors and software, applying a speech program called "linear predictive coding" that he'd used with [toy dinosaur] Barney to yield the most talk out of the least computer-chip memory.⁵³

Another interview referred to 'some simple rules of programming Hampton calls 'emergent behaviour'. ⁵⁴ Giving such quotes to the media suggests that Tiger Electronics was not, at least in any effective sense, coordinating a media campaign to consistently portray Furby as true AI.

There were a few, fleeting perceptions of Furby as a security threat, something which would be overstated in later media's myth-making coverage of the toy. My review of the 1998-1999 articles found that the US National Security Agency's ban on Furby was only for its one office location in Fort Meade, Maryland. St A CNN article announced the NSA ban, but made it clear that the perceived threat was not Furby learning something. It was merely that Furby was thought to be an audio recorder. Furby is embedded with a computer chip that allows it to record words', the article stated. Because of that ability, NSA officials were worried 'that people would take them home and they'd start talking classified,' one Capitol Hill source told *The Washington Post*. The fear was that it might record national secrets and speak them back, not—as contemporary discourses will suggest—that it was a nascent form of artificial intelligence, such as Skynet, the world-dominating machines of the popular *Terminator* films. This security concern was considered petty enough to generate a satirical article, "When Furby's Squeal," which imagined embarrassing personal scenarios of Furby's parroting private conversations. Another journalist also dismissed the potential threat, concluding that Furby was an 'interruptive' and 'interminably annoying' 'nagger', but that the 'unofficial poster child' of 'new smart toys ... may or may not be a threat to national security. But Furby is, without a doubt, a threat to our national sanity'.



The NSA office ban would be cited in contemporary media discourses as an example of a purported over-reaction to a child's toy over two decades ago. As suggested previously, this is similar to Foucault's description of an era of sexual liberation inaccurately pointing at Victorian sexual repression to congratulate themselves. However, in addition to inaccurate—the NSA ban was more limited than recent articles will suggest—I also wish to note that what responses there were to Furby from a security perspective were not necessarily disproportionate or unusual compared to current practices. If, as Marwick describes, a disproportionate response is the defining aspect of a technology-related moral panic (what she calls a 'technopanic'), ⁶⁰ Furby did not meet the standard. Cameras and audio recorders are prohibited from US federal courthouses. ⁶¹ The US Department of Homeland Security's 15-page list of items prohibited from federal facilities includes sling shots, realistic toy guns, and spray paint. ⁶² The US Public Safety and Homeland Security Bureau list of banned media and communication technologies includes the entire lines of products and services from ten international telecommunication companies. ⁶³ In comparison, the Furby response seems far from hysterical Luddite technophobia.

Other than acknowledging that small mechanical parts could be choking hazards with young children—a standard refrain in holiday toy reporting—there were few safety-related articles, not nearly enough to suggest technophobia was at play. There were two Canadian articles regarding fears of Furby interfering with hospital medical equipment, but these were quite staid and straightforward. Furthermore, they were not about perceived AI: 'The *Canadian Medical Association Journal* reports that a series of tests on the toy with the computer chip conclude Furby will not interfere with the performance of medical devices', wrote the *National Post*. 'The research found the electrical and magnetic waves generated by the furry creature were small and pose little risk to 13 different kinds of sensitive medical equipment.'⁶⁴ In another report on this study, the author went so far as to note that 'the electric and magnetic waves generated by the furry creature were small—about 70 times weaker than those from a digital telephone.'⁶⁵ The only other reported concern was that Furby could potentially interfere with airplane navigation equipment. The *Wall Street Journal* reported that airlines were requiring Furby batteries to be removed, but a manufacturer spokesperson said to his knowledge, 'there is no conclusive evidence that Furby's interfere with electronic equipment.' Such a ban was not considered extreme, but rather 'treat[ing] the Furby as any other electronic device'.⁶⁶

Although there was not ubiquitous misrepresentation, there were strong emotional reactions. As noted previously, emotion is not necessarily panic. Emotions exist in a false dichotomy with



rationality, as if they are mutually exclusive. However, a strong emotional response does not negate understanding of facts, nor is it necessarily a panic. The expectation of topianism in reactions to new technologies can prime one to view emotion as an indicator of topianism. Much invective was weighed on the appearance of Furby's as 'slightly scary ... [with] bug eyes, big ears'.⁶⁷ They elicited baroque descriptions such as: 'profoundly unattractive. ... The empty spaces that gape beneath its shiny eyeballs raise chilling visions of a decomposing (if strangely furry) corpse'.⁶⁸ Others were inspired to florid alliteration and colourful comparisons, such as calling them 'mud-puddle-ugly, grapefruit-sized creatures ... hirsute little hooligans ... a cross between Chucky and an Ewok. It's a Gremlin without the movie tie-in'.⁶⁹

However, the behaviours of Furby's received even more antipathy. One article bemoaned how Furby 'act[s] weird' and was eventually 'smelling bad ... [and being] pushy, spoiled, mindless and flatulent'. 70 Another voiced a common complaint of the toy's 'major attitude. ... [It] becomes snippy if not enough attention is paid and will even sneeze in your face'. 71 This distaste for the device led to some strange comparisons. 'Cranky and unappreciated, it passes gas, burps, and pouts. Girls, this toy has 'first husband' written all over it. ... When it comes to annoying toys, Furby is in a class all its own.'72 Furby evoked other highly personal, idiosyncratic comparisons: 'one woman found a defect in her Furby, and she didn't even want to return it. She kept the broken toy and treated it like a child with a disability.'73 One journalist made a rather bizarre reference to an archaic (and now pejorative) term for breeding between humans of different races. When describing a new Furby sitting before them, they wrote, 'Its thorax is candy pink, as are the insides of its batlike ears and its rather sporty topknot. (Apparently, when you leave your old stuffed animals up in the attic for too long, they start to miscegenate.)'74 Such odd comparisons—ex-husband, disabled child, taboo racial mixing—suggest the lengths to which persons went struggling to articulate emotional reactions to Furby.

I suggest these reactions present, not topian reactions to a misperceived AI sublime, as would be thought to be associated with disruptive new inventions, but instead a *technological banal*. This has been described in the electrification of a rural city that did not respond with the great fears or spectacular excitements many scholars have described. Indeed, the reaction to Furby as simulated AI seems exceedingly restrained. This is especially so given the broader context of technological culture in 1998 and 1999, as described previously.



Contemporary Discourses

As is the pattern with residual media, Furby has maintained a devoted niche of subcultural fandom. Since 2017, the blog at https://furbytech.tumblr.com/ has published hundreds of posts about disassembling Furby's. Fans congregate at wikis, in Discord servers, and at other social media crossroads, with originals, mods, and Furby-related items readily available on Etsy, eBay, and elsewhere. A bejewelled Furby appeared in Adam Sandler's 2019 film *Uncut Gems*. In recent years, Furbys have been sewn together in emulation of the horror film *Human Centipede*, included in stand-up comedy routines, and used as the subjects of erotic art. To

Alongside this continued popularity, a narrative has purported that Furby was, for many, an early, if not their first, consumer experience with the concept of AI. In 2011, a user of the Redditt r/ askscience forum asked how Furby compared to then-contemporary consumer AI. Question forum *Quora* includes threads from recent years such as 'How does Furby AI work?' and 'Are Furbys Considered Examples of AI?' as well as 'Why is a Furby Considered a Scary Toy?' and 'Why do Some People Hate Furby?' Such queries suggest the search for emotion as topian panic indicators, as mentioned previously. A current popular history of AI lists Furby as having helped to popularize AI. While researching this paper, Google returned suggestions such as, 'Do Furbies Use AI?' and 'When did Furbies get banned?'

Part of this mythmaking suggests that Furby generated a fearful reaction—one that now seems quaint—to such a degree that it was banned by the US National Security Agency. A 2018 business article asserted that 'Furbys⁸¹ were the ones who inspired our behaviour towards AI (artificial intelligence). I know it sounds crazy! But it really is the case.' The article explained that the toy was 'programmed to start using English over a certain period of time, which back then sparked the imagination of machine learning.' The same year, a consumer-technology buying guide incorrectly described many 'urban legends' about Furbys imitation of AI, causing it to be banned by multiple intelligence agencies.⁸³ Continuing in this vein, in 2020, an *AV Club* article explained that 'Furby represented one of the first attempts at domestic AI mass production' but, since then, 'has increasingly become cursed by a culture of techno-paranoia.'

These articles, and others like them, cited the NSA ban of the toy, and the latter argued that Furby had been 'echoing a growing unease surrounding technology at the time'. 84 Furthermore, a historian of the United States' Federal Aviation Administration (FAA) wrote how 'some



considered Furby a danger and even as enemies of the nation' with incorrect 'rumors' that the FAA banned the toy. 85 A humour publication listed 'Furby-gate' as number one in a list of '15 Harmless Things That The US Government Absolutely Freaked Out About', purportedly illustrating irrational US fear of foreign technology. 86 Mental Floss, a Millennial-focused online magazine with an associated video podcast, Misconceptions, debunked 'Furby fears' as one of several 'myths from the last decade of the 20th century'. 87 An investigatory news and entertainment site described how Furby had been perceived as a 'dire threat' because 'the agency tasked with defending our nation and securing our future couldn't be bothered to crack a toy potato bird open and see what was inside'. 88 Verifiers of the amazing, Ripley's Believe It or Not!, told how there were 'many Furby-related conspiracies, including that the robo-pet was teaching kids bad words, interfering with flight equipment, and was even an international spy.'89 A 2021 master of fine arts thesis at the University of Massachusetts, Amherst, asserted that Furby's imitation of learning 'was enough to send many adults into a panic, and the National Security Agency ended up banning the devices from its Maryland offices'. Even when the truth was revealed, 'the NSA ban stood, Furby couldn't be trusted not to spy on our nation's secrets.'90 Unease regarding the toy was exaggerated for comic effect in Netflix's 2021 animated film about a robot apocalypse, *The Mitchells vs. The Machines*, in which hordes of evil Furbys attack a family. 'Behold! The twilight of man', one says in Furbish before they summon their 'elder', a giant Furby, who vows to begin the 'dark harvest' of killing humanity. 91

While revising this paper in 2023, the toy's twenty-fifth anniversary, a headline announced that 'AI Has Transformed Furby From A Fluffy Toy To Something Evil.' It was one of several Anglophone news outlets that April who reported on software engineer Jessica Card. Card had gone viral on social media for connecting the talking toy to ChatGPT, the generative AI provoking a torrent of debates, fears, and narratives about AI. '22 A UK *Daily Mail* headline spun this dystopic tale: 'Programmer hooks up ChatGPT to a FURBY - and the toy makes TERRIFYING claim it will 'infiltrate households' and manipulate owners in plot to 'take over the WORLD'.'93 This incident reflects the continued popular and resonant associations between a toy that peaked before the turn of the last millennium and AI. Indeed, in promoting their video, 'A.I. Expert Answers A.I. Questions From Twitter,' *WIRED* magazine first listed the two questions 'Will ChatGPT end college essays?' and 'Is Furby A.I.?'94 The antipathy has persisted as well. An Australian journalist, after living with one for a month, claimed Furby as a 'queer elder', but also said, 'I threw my Furby into an active volcano.'95



Conclusion: We 'Other Luddites'

Foucault critiqued the self-congratulatory sexual liberation of the late twentieth century by challenging their perception of Victorians as prudish and asexual. Furby was not a mythic harbinger of techno-dystopia, but part of a technological culture created, discussed, and reacted to by humans, and one with potent residual relevance. As Mosco, Sturken and Thomas, and others argue, however, myths can have real effects, intra-acting with aspects of culture ranging from economics to military funding. In developing into a retroactive myth of a technopanic, Furby, an emotional engine, incorporates the zeitgeist of a contemporary AI sublime with potential to become an educational narrative with inaccurate foundations. This is risky at a time when the US in particular is still racked with populist political turmoil, often drawing on revisionist histories, and denialism of accepted science, such as evolution and vaccinations.

To conclude, I argue that generating such intense emotion has been a central component to making myths in technological culture, as in the recent media coverage of Furby. These are more significant in that they could become supermyths. Sutton coined the term to refer to a story used to teach about inaccuracy (or related cultural foibles), but is itself inaccurate and ultimately 'entrenches the original.'96 Supermyths foreground one of the significant dimensions of myth-making: they are not merely misunderstandings, but misunderstandings used to teach about accuracy, misperceptions, science, and other important areas necessary to having a well-informed democratic population. They are stories intended to teach technological literacy and scientific accuracy. However, they are inaccurate. As a child's toy with what was touted as AI technology at the time, reactions to Furby can be read as offering insights into contemporary conceptions of AI, particularly in domestic and educational settings. In such a case, retroactive imaginaries of such reactions to emergent AI (or the appearance thereof, as with Furby) suggest what we *in the present* desire the past *to have thought* about it: Constituting panics in order to reassure ourselves of our more rational present.

Consider concerns about children accessing pornography and sexually explicit content on the Internet. In 2004, Sarah Banet-Weiser argued that these anxieties about the lack of regulations and ease of access to adult material were heightened by fears that the Internet was creating a generational divide, one which left parents behind. This was a familiar pattern of technological discourse, echoing fears of television and other media causing juvenile delinquency. ⁹⁷ Similar displaced concerns appeared in Furby coverage as well, continuing this pattern of technological myth



in which children are masters of new technologies, yet also uniquely vulnerable to their dangers. "Furby craze makes parents cry, 'stop'," read an article in the *Edmonton Journal*, which went on to editorialise that 'Too many of us are giving into our children's whims.'⁹⁸

However, to depict a large-scale panic reaction to Furby, from contemporary hindsight, performs the risky myth-making work of reassuring parents and technology users today that they are comparatively enlightened and can rest assured that their steadier take is accurate and rational. In other words, gloating over the mistakes of the past affirms certainty in the correctness of the present. In so doing, such mythmaking diminishes critical thinking and scepticism by asserting an ideology that we 'Other Luddites' are *not* irrational, misguided, or hyperbolic. This is the danger in creating such myths. When the advances of AI need to be interrogated more thoroughly than ever, we do not indulge in congratulating ourselves for not being gullible or misinformed, like those foolish Furby freakouts.

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