winter 2025 volume 4 | issue 1 | 109–144

marxism & sciences

id#: *m&s.* 2301.04107 ARTICLE

The Neotenous Image: On the Technical Adaptation of Alienation

Xindi Li

ABSTRACT: There is an animus that comes with the animatronic sparkle of cute things. When an animated character is described as cute, it also becomes carved out as a receptacle for violence and disposability. This article tracks the simultaneous alienation and intimacy that is produced through the animated image, in the context of how it generates a vital force that also marks its life as a commodity. I argue that cinematic animation uniquely captures its own technical development, in which the image retains and reworks its prior forms. This is what I term the *neotenous image*. It is through this image that technical and economic alienation are not only captured but magnified, in its shared dimension with the conditions of commodity production. Using the film *Tamala 2010: A Punk Cat in Space* (dir. t.o.L, 2002) as a parable for this type of image and mode of production, I show how cuteness functions not only as an aesthetic category, but a channel for the reproductive force of animated image-commodities. It is in these commodities that intimacy and alienation are able to reproduce each other dialectically, in their contradiction. Using Bataille, Marx, and Simondon, I show how the cute image-commodity's perpetual sacrifice and rebirth models a visual economy that exploits and expands the temporality of crisis, rather than simply being a result or representation of it. In this way, the neotenous image names the developmental logic of the technical object in, and as, the historical condition of a capitalism that incessantly thrives on the novel, cute thing.

KEYWORDS: animation, alienation, commodity fetish, media studies, technical development.

Li, Xindi. 2025. "The Neotenous Image: On the Technical Adaptation of Alienation." *Marxism & Sciences* 4(1): 109–144. https://doi.org/10.56063/MS.2301.04107

• *Correspondence:* Xindi Li, UC Santa Cruz.
• e-mail: xindixindixindi@gmail.com
• ORCID: 0009-0001-1950-5231
• DOI: 10.56063/MS.2301.04107
• *Received:* 30.07.2024; *Revised:* 04.06.2025; *Accepted:* 07.07.2025
• *Available online*: 12.06.2025

Introduction: Parables of the Cute

The cute is ubiquitous in its seduction. When I project a still from the film, *Tamala 2010: A Punk Cat in Space* (directed by t.o.L, 2002), everyone in the classroom agrees that the eponymous robot cat is cute. She blinks her large eyes, her face rearranging momentarily into the ASCII emoticon "UwU" with the accompanying sound effect of a xylophonic *plink*. Her mouth (the "w" of UwU) always appears to be in a smile no matter the situation, as it figuratively depicts an upturned, feline lip curl. Like the rhetoric I will often deploy in this article, Tamala speaks in parataxis. Paratactical speech can be compared to the way in which children speak, yet the use of this device is most famously biblical. And so with the cute: it appears at once disjointed and declarative, naive and commanding, transcendental and profane. It appears to be an objective trait (we all agree something is supposed to be cute), as well as a product of objectification: the cute often asks us to collapse the desire to *consume* it and the desire to *be* it. It also appears as an analytic object, thus embodying this same series of logical contradictions. As an ideal and aesthetic category supposedly recognizable to us all, the cute is paradoxically sensual and inaccessible, a remote surface that demands to be felt up close.

Cuteness incites endearment and attraction, while belying a sense of emptiness underneath. The word itself is an aphesis, in which a word's initial unstressed vowel is foregone: if cute is round lines and buoyancy, then its etymological ancestor, "acute" (from Latin *acus* or needle), indicates a sharpness that blurs the boundaries between the physiology of organism and tool, revealing the dulling of cute in its aphetic adaptation.[1] "Cute" is thus on the receiving end of "acute"— a stuffed animal that is the receptacle for a knife—as well as its masochistic offspring. Violence is already implied in the cute object, as its vulnerability can invite both caress and abuse. Cute is then the Damocles sword of epithets: neotenous and feminine, the cute thing is nonthreatening and dismissed based on one's attraction to it, always bubbling while promising nothing beneath the surface. A receptacle implies that the cute has depth, but instead it wears its internal logic on the surface. The cute is

1. In linguistics, aphesis is a specific form of apheresis, in which the word's initial vowel is foregone. Aphesis refers specifically to the loss of the unstressed vowel. When I say cute is dulled, I don't mean to imply that cute doesn't retain some of its ancestral sharpness in becoming a receptacle for that sharpness. Wan-Chuan Kao and Jen Boyle write on the etymology of "cute" as derived from "acute": "To be cute is to be in pain; cuteness is a figure of Roland Barthes's punctum or Georges Bataille's point of ecstasy." See Boyle and Kao (2017, 17).

surficial in the Deleuzian sense: it doesn't oppose surface to depth, instead staging their reciprocal emergence. Rather than an object characteristic, the surface braids together a relation of bodily affect with incorporeal time, and in so doing, the surface doesn't seal off depth but reveals it (Deleuze 1990). This article homes in on the cute image in and as the sliding of planes on a surface, which is also classically one component of animation, in and as the production of movement in time.

Likewise for literary theorist Sianne Ngai, the cute is a relation, albeit a commodity one: she calls the cute a "minor aesthetic," invoking the simultaneous dismissal and compliment of cuteness as the aesthetic repertoire of the commodity. Quoting Walter Benjamin, Ngai reminds us that cuteness belongs to the everyday life of objects, which I have been calling its profane register: "If the soul of the commodity which Marx occasionally mentions in jest existed, it would be the most empathetic ever encountered in the realm of souls, for it would have to see in everyone the buyer in whose hand and house it wants to nestle" (Benjamin 1973, 55; cited in Ngai 2012, 4). One needs to look no further than the surface for this phenomenon. Consider as an example recent internet trends: K-pop hand gestures mimicking two-dimensional hearts, cat ears worn by online streamers, and the continued globalization of Japanified cartoons are a few examples of a seemingly infinite archive. The surfaces of the cute thing appear three-dimensional, round and cherubic, abolishing distance through intimacy while maintaining its remoteness. The cute maintains its withdrawal paradoxically, through the mediatic limit that it constitutively is—a flat screen that projects all surfaces and induces consumptive desire. It is in this other sense that cuteness is surficial, casting off animatronic sparkle as it thrives within an inscrutable plane. Likewise, recent accelerationist thought has turned to cuteness as a framework for understanding 21st-century aesthetics and politics, building on and updating Marx's analysis of technology and the commodity form.[2] The surficiality of the cute is not simply a flat plane or a visual aesthetic, but an ontological mode of the commodity in and as image. This image-commodity projects the semblance of life, independently of the relations that have created it. Today, the popular and scholarly interest in cute is a resurgence disguised as a novelty: the cute commodity perpetually convinces us of its own life force and its youthfulness through its imaging.

2. See Ireland and Kronic (2024).

In this way, the Japanese experimental film *Tamala 2010* functions as a parable of cuteness *par excellence*, illuminating both the technical production behind its imaging and the aesthetic logic of the commodity. Directed by the art and design duo t.o.L (Trees of Life), the film privileges disparate regimes of animation; from a simulation of the classical two-dimensional sliding planes of limited animation, to intercut sequences of a parallel three-dimensional world, to a few brief, camera-captured scenes—all pointedly presented without seamless integration. This is how the film weds the development of the *technological* creatures we see on screen (Tamala is robot-cat-girl) with the *techniques* of image production. This development, we will soon see, demonstrates a *neotenous image* by utilizing the assumed succession of several technical regimes, from the animation stand to 3D computational modeling to photographic cinematography, to confound the developmental trajectory of the image. While these respective imaging techniques may at first appear to succeed each other, *Tamala 2010*'s deployment of these distinct techniques does not resolve them into a single, linear mode of development in the image. Instead, they each bud from the shared stolon of the computational animated image, where older modes are retained as potentials to be tapped rather than nostalgic relics. This neoteny is coextensive with the plot: Tamala coquettishly reports that she is one year old, but the film shows that she is in fact programmed to be sacrificed over and over throughout millennia in order to be reborn as a living commodity for the monopoly Catty & Co. The film is apt in demonstrating how the cute thing solicits care and violence simultaneously, especially in situating the character Tamala within a Bataillean sacrificial economy.[3] The twin excesses of cuteness and cruelty operate together as the engine of an indefinite expenditure, in which she must be sacrificed to forward Catty's existence.

But *Tamala 2010* shows us that excess itself is paradoxically *contained* through consumptive sacrifice, demarcated as a necessary surplus to continue a capitalist economic existence. Although the film was largely relegated to the status of obscure media following its initial release, its recent rerelease on Blu-Ray (complete with supplementary academic commentary) speaks to the film's continued relevance. That this rerelease coincided with the writing of this very article aligns with my analysis of its logic of deferred renewal and the uncanny afterlife of the cute commodity. Also, the film is continued in several spinoffs and a

3. See Raine (2011, 203).

promised feature-length sequel, *Tamala 2030: A Punk Cat in Dark,* and its prescience demonstrates how the cute continues to posit itself as novel through the cycles of renewal and destruction.[4] This perpetual production of novelty raises a central question: how is this surplus, of life in the cute object that is produced by the technical form, contained and managed within capitalist systems that depend on both continual expenditure and renewal?

To address this, I turn to what Georges Bataille identifies as an "overlooked" dimension of Marx: the sacrificial economy. In order to eliminate material obstacles and return man to an intimacy with his own being, Marx proposes to free the economy of things from all that is extraneous to it. While most interpret this liberation as the removal of material obstacles that hinder human freedom, Bataille rereads Marx to propose a reversal: to free the world from that extraneous *of* things means to free the world from that extraneous *to* things. In other words, to carry Marx's project to its limit is not to emancipate man *from* things, but to dissolve the very separation between them. By inverting Marx's image of man-enslaved-by-things to things-enslaved-by-man, Bataille means to show vis-à-vis sacrifice how Marx *reduces* the commodity in its thingliness to the condition of man. Not only does this rereading of Marx take the soul of the commodity quite seriously (and literally) but it also performs a profane adequation between man and thing, in bringing man down to the level of the thing. The tacit proposition animating Bataille's rereading is therefore that an intimacy, rather than utility, can only truly be felt when things are freed from their economic order in the instance of sacrifice and thus negation. Intimacy is used here not as an affect nor affection towards an object, but as the violent fungibility between man and thing, a condition in which subjects and objects become interchangeable through sacrificial expenditure.

While cute is certainly not a term that Bataille would use to describe the Aztec sacrifices in ancient Mesopotamia, I argue that what is novel about the cute is that it has today become coextensive with a sacrificial economy mediated by technical images. The cute no longer exists as an aesthetic flourish atop economic excess, but instead tethers this sacrificial economy to the technical apparatus of its production. Yet the cute

4. Following *Tamala 2010*'s original release, there have been a few spin-off short films directed by t.o.L: *Tamala on Parade* (2007) and *Tamala's Wild Party* (2007), and *Wake up!! Tamala* (2010). While I don't write about these here, or other Tamala media mix such as books, toys, and other merchandise, the film is increasingly relevant in both its ongoing and prior production, despite being paradoxically known as a piece of "forgotten" or "obscure" media.

invokes intimacy in and for the utilitarian ends of sacrifice and renewal, thereby staging its own contemporaneity. Cuteness is always already an image, and thus a technical regime: neither man nor thing, but mediating and exploiting qualities of both, often with cartoonish flattening and distortion. It is a technical regime not just because it is produced by a technological apparatus, but because of this precise mediation between man and thing, consumption and production. Throughout this piece, I call this mediated form the *image-commodity,* and my contention is that *Tamala 2010* makes its surface limits visible, both through the imaging regimes of its production and the plot's dystopic depiction of a capitalist order in crisis. The cute image-commodity functions as a modality of capitalist endurance under crisis. It puts forth a theory of technical and economic adaptation grounded in neoteny, the evolutionary strategy that retaining juvenile traits allows a species to evolve from within in order to perpetuate itself. The cute thrives not in spite of crisis, but through it.

To give a brief historical background, Tamala is not only a hybrid of several species but also a parody of several of her media predecessors. Her character design references Astro Boy (a robot-boy and prototype for many anime and manga conventions, introduced by Osamu Tezuka in 1952), Doraemon (a robot-cat, predominantly marketed to boys starting from 1969), and Hello Kitty (a cat-girl, marketed to girls by Sanrio beginning in 1974). So situated, it should come as no surprise that the boom of cute, machinic-anthropomorphic animals (or perhaps machinic-zoomorphic humans) in cartoons emerged in the middle of the 20th century, alongside a postwar cybernetic imaginary that reconceptualized the human and nonhuman as parts of a single communicative system.[5] Crucial to these mobile character designs, which can be easily displaced from their original context and shuttled into various media such as manga, anime, and toys, is their hybridity: they frequently combine traits of robot/animal/child, and exploit the overlap that already exists between these species categories. This focus on the character design and transformation of the characters leads to an experience of their vitality, as creatures that take on a life force of their own.[6]

As several scholars of Japan studies have pointed out, *kawaii* (Japanese cute embodied by phenomena like Hello Kitty) became hegemonic

5. For more on anthropomorphic animals in wartime animation, see Lamarre (2010). For a wartime system that incorporates human and nonhuman components, see Galison (1994). For its postwar reckoning and a detailed history of the waves of cybernetics, see Hayles (1999).

6. See Lamarre (2011b, 114).

in the transnational expansion of Japan's soft-power capital, asserting the nation as both influential and benign.[7] This geopolitical softening was entangled with domestic social and economic transformations: in *Millennial Monsters*, Anne Allison posits that the craving for, branding, and fetishization of ever-youthful, animal-like cartoon characters during the dawn of the new millennium in Japan served as surrogate or "shadow families" in response to growing antisociality within Japan's shifting labor and kinship structures (Allison 2006, 91). Allison describes cute Japanese goods as assuaging "intimate alienation," a structural condition in which people remain profoundly disconnected from one another even as they are shuttled together daily between public spaces revolving around work and school. Such goods exert the dual appeal of what she calls "polymorphous perversity" and "techno-animism." In other words, there is a life force that animates these mass-produced toys and gadgets that promise transformation and recombination, and as such supports the further desire for consumption. Marketed as healing agents to repair a growing social rift, they also exacerbate this rift further. This intimate alienation is in part a result of Japan Inc., a post-Fordist model of big business organized around corporations linked to the government that became a template for the nation, a fantasy of abundance that burned out after the economic bubble burst in the 1990s. The aftermath saw a rise in "inexplicable" violence, bullying, social withdrawal, and other ruptures in the fabric of the social. The attachment to cute characters and commodities multiplied, not only domestically but in the global export of "Cool Japan," resulting in parallel enterprises of the cute and the cool abroad. The cute became a surrogate salve for intimacy in the wake of alienation, even as it economically contributed to that alienation through its embeddedness in late-capitalist production. The failure of Japan Inc. did not mark the disappearance of cute, but its entrenchment in and contemporaneity with crisis.

What interests me here is not only the *adoption* of a menagerie of cute objects as a substitute for intimacy, but also the *adaptation* of the

7. While it's not my goal here, nor do I have the space, to address in depth the transnational flows of Japanese soft power that undergird the animation of these cute creatures, such points have been cogently discussed by the scholars cited below. I briefly touch on some of their points in the body of the article in order to hone in on the techno-animist or techno-vital force undergirding the boundaries where image and referent become less rigid, and why the cute is situated on this faultline. One other takeaway from these scholars that is tacitly present in my argument is the notion that Japan is an area that is specific in its *relationality* to other areas, but I neither dwell on the uniqueness of Japan nor find it productive to do so. See Kinsella (2013); Lamarre (2009); and Yano (2009).

image of cute in and as a technical mode. Throughout this article, I use the term techno-animism as shorthand for how cute little creatures project a semblance of vitality, a mechanical effect generated by the force of the animated image—which carries over in their displacement from that image to merchandised goods. This techno-animist adaptation deepens a mode of alienation between humans and objects by exploiting the very affinities that make those objects feel alive. Thus, the cute is a medium and therefore a technical mode *of* alienation. But the cute is also an adaptation strategy *to* alienation. Ngai has suggested that the cute object works like Winnicott's transitional object (such as a doll or blanket), enabling the infant's transition from the world that is exclusively part of the self into a world that is outside of oneself (Ngai 2012, 89–90). This type of object is, for my purposes, a means of mediating and adapting to the world outside of oneself. Otherwise said, it is a technical means of living with alienation, rather than overcoming it.

I begin the first section by analyzing *Tamala 2010* as a film that harnesses a techno-animist force in order to stage a form of adaptation that is known as neoteny. I do this in order to demonstrate that neoteny functions as a technical mode of adaptation, rather than a biological strategy of evolution. In the second half of this article, I develop the political economic dimension of technical neoteny by returning to Marx's suggestion that the commodity possesses a kind of vital force in its imaging. Taking this assertion quite literally, I contend that capital adapts from within through a logic of sacrifice and renewal. Capital is sustained by the very crises it produces, generating a mode of time that appears to reproduce itself endlessly—but not eternally.

I. The Technical Life of Images

Tamala is so sleepy. When we encounter her for the first time she's getting out of bed, stretching and yawning, a small tear rolling down her cheek. Her feline malaise takes on the vulnerable, anthropomorphic quality of a child. Tamala's sleepy teardrop reappears shortly after she's reborn at the end of the film. Like most of the characters in the film, her head is round and too big for her body; her exaggerated proportions are infantile. Her puerile voice (she's voiced by Hisayo Mochizuki, an actress known for playing young girls and childish women) and the bubbly sound effects emphasizing her steps serve a similar purpose, casting in a playful light her more aggressive traits throughout the film. Tamala smokes cigarettes, skateboards, fronts a punk band, lands a roundhouse kick onto other characters (including a vacuously infantile kitten), and

signs off with a blasé "fucking goodbye" in English. The aggressive action done *by* Tamala is the flipside of the violence done *to* Tamala: she's eventually eaten by the sadistic German shepherd in police getup, Kentauros. Her skull, bones, and pack of cigarettes plop to the ground, horrifying the only witness, her boyfriend Michelangelo. This scene sets in motion her eventual rebirth and the revelation that Tamala is just one component in the machinery of the ancient sacrificial cult Minerva, which has evolved into the conglomerate Catty & Co. Catty uses Tamala as a mascot in its advertising and monopolizes the world of the film, its logo a stylized rendering of Tamala's eyes. Both the violence done to and by her are tempered by the cute in that it produces a vitality, a renewable life force produced by the pliant lines, round contouring, and ebullient noises that make her up: in *Tamala 2010*, violence never results in tragedy.

Whereas in life, a cute kitten's endearing qualities are indeed based on their vulnerability to violence, the animated anthropomorphic kitten incites violence because she can outlive it. Anime and media studies scholar Thomas Lamarre in his three-part series on the "speciesism" of 20th-century Japanese animated characters, contends that the technical ensemble of animation production led to an emphasis on the animation of animal and animal-like characters in cartoons. The result of this ensemble can be seen in animation's formal elements, including an emphasis on geometric shapes and fluidity of lines, fewer expectations for verisimilitude in motion, and fixity of camera—thus equating the deformability of characters with a kind of vitality or resilience. In other words, such elements channel the mechanical force of the moving image onto the characters, which Lamarre formalizes as "techno-animism" or "techno-vitalism" (Lamarre 2011b, 113). Animated violence deforms but never destroys, and deformation is for that reason also vital renewal. This susceptibility to deformation is exemplified by the squash-and-stretch, one of the foundational techniques of animation, which emerged in the 1930s and was later formalized by Disney animators Frank Thomas and Ollie Johnston. The elasticity of the animated body in motion forms a recursive circuit: deformation is always followed by a return to the original shape, so securing the *endurance* of deformation.

Why is it that this vitalism always has a prefix? And why is it that while the root appears to be substitutable, the prefix *techno-*, which references *technics*, is fixed? Lately, the term technics has seen a boom in popularity, especially in media philosophy, for how it conceptualizes the relation of development that proceeds between *technique*, as embodied

or operative action, and *technology*, as an objectified form. Technics names the processes that bind these together, in which techniques like doing and making co-evolve with the technical objects made. It is apt, then, as the term overcomes the binaries of inorganic/organic, machine/organism, and nature/culture by showing how these oppositions are produced within, and continually negotiated by, technical processes. Seen this way, adding the prefix *techno*-to *animism* and *vitalism* is no mere modification of life. Rather, it is a surplus, inhuman life force that can be taken and reinvested. This surplus of life in Lamarre's use of "techno-animist" emphasizes a technical quality through *animation* as medium, *animality* as species, and *animism* as an experience of life channeled by a technical force. If these aspects are realized as technical force and then redoubled into the cute image, they also produce an excess and a potential that are ready to be mined.[8]

At the technical basis of animation in the era of the animation stand—an apparatus that combined layered celluloid drawings with a fixed or limited-motion camera—techno-animism is channeled into the moving image through character design (Lamarre 2011b, 113). If cinema animates the human body, then animation privileges the nonhuman and inhuman: populated by robots, spirits, and nonhuman animals, there is an extra-sensuousness to the life forces of the little creatures in the animated image. Lamarre writes that the plasticity of animated characters do not "*represent* the force of the mechanical succession of images" but instead "affords the actual experience of it"—and such characters channel their own technical force through the succession of images, "experienced as an animal force, as vitality, as life itself."[9] The plasticity of the character, as Lamarre points out elsewhere, is what allows the character's vulnerability to violence and renewability

8. The cute of gestures and expressions in living beings are already technical prior to being captured by a camera—that is, they are techniques. However, this also happens in gestures that mimic and anticipate the flat screen mediating images: From heart fingers to viral dances, these performances develop in tandem with the presence of a camera. And cute images are able to reproduce, therefore carrying on the life of, such techniques. Neither are representations of the other, but they instead form a series of technical operations that together bring about the animated image-commodity.
Further, these imaging techniques are made most apparent in their *failure*. From Kim Jong-un's attempt to form the K-pop popularized heart fingers when meeting with South Korean President Moon Jae-in in 2018 to critiques of the Chinese Communist Party commissioned Marx anime, *The Leader* (2019); these attempts at cuteness fall flat not only because they're seen to be done in bad faith, but in their failure to work as circulable *images* that successfully synthesize the very remote—the alienated—into the mendacious and the intimate.

9. *Emphasis mine*.

thereafter.[10] As the moving image is channeled into a plastic embodiment of that force, we're not, for example, surprised when Wile E. Coyote is alive in a subsequent episode after an anvil falls on him. This plasticity to the image is what Sergei Eisenstein has famously rendered "plasmaticity," due to the fact that there is a loosening between the image and its referent (Lamarre 2011b, 117). Lamarre's argument focuses on the transformation in Japanese wartime animation of "racial others into cute nonhumans," which has two major effects on the aforementioned loosening: 1. Through a sense of play, there seems to be an overcoming of racial, ethnic, and national divisions and conflicts; 2. The plasticity of animation, channeled into the humanlike animals through the force of the moving image, makes "decoding happen materially." This implies that the material operations of the medium itself, which are technical and kinetic, are expressed in the image. The animated image overcomes certain antagonisms that it portrays through not only synthesis, but also plasticity, thus its formal distinction from live-action cinema. We can see this in *Tamala 2010*, as her character is a synthesis of not only referents to characters like Astro Boy, but also species—she's not completely girl, nor robot, nor cat, though she retains traits of all of these without purporting to represent any one faithfully. She invites the viewer not to decode these separate aspects of herself, instead fabulating the mythos of her own being by drawing on the technical force that has produced her. Life is introduced into the social and political vis-à-vis the technical. As already mentioned above, we can understand techno-animism from here on as shorthand for this surplus, inhuman life produced by the animated image. This surplus life will later become important for a political economic understanding of how the image-commodity entrenches alienation.

These techno-animist qualities are exploited with a twist in *Tamala 2010*. The film typically emphasizes a flat, planar image by utilizing a black-and-white palette, minimal shading, and sliding planes that animate background objects with a bobbing motion reminiscent of late 1990s and early 2000s Flash games. Its minimalist, geometric style draws on both postwar Japanese anime like *Astro Boy*, as well as Takashi Murakami's postmodern art movement, the superflat. The aesthetics of *Tamala 2010* thus invoke a temporal gap, employing both 20th and 21st-century aesthetics. This emphasis on the planar, sliding quality of characters moving in their milieux is exploded when the film abruptly

10. See Lamarre (2010).

cuts to the third dimension. The giant robot-cat-deity Tatla—depicted headless, ascending an elevator, and as an idol of the cult of Minerva—is the only 3D-rendered character in the film. These computer-generated (3D-CGI) scenes are cut to between Tamala's superflat, planar animation. While visually distinct, they retain a parallelism with the 2D scenes: after Tamala is beheaded by Kentauros, Tatla regains her head, appearing as the engine of Tamala's rebirth. The Tamala-Tatla relation, and the interplay between 2D and 3D image which that relation structures, remains ambiguous until the film's apotheosis. In the culminating scene, a now-cephalic Tatla and Tamala are on screen together for the first time (Figure 1). Anticipating Tamala's resurrection, this sequence pulses with vibrancy as the frame is rendered for the first time in bold, superflat planes of color. It is also in the montage leading up to Tamala's rebirth that the film introduces another formal rupture: a brief live-action shot of a low-angled, underexposed view of trees swaying in the wind against a fractured, pale sky.

Plotwise, all of this is anticipated by the revelation that Tamala is perpetually reincarnated by Tatla. The latter is worshipped by the ancient cult Minerva (now Catty & Co.), who use the former in their ambitions to return to power. Tatla's code commands, "buy things, destroy things, buy things so that the world will advance infinitely." While Tamala's own intention is to return to her real mother on her home planet Orion, Tamala is continually reborn and sacrificed to forward Catty & Co.'s interplanetary expansion. This absurdist, conspiratorial exegesis happens in a flash-forward presentation given by the wizened academic cat Professor Nominos.[11] It is in the scene of Tamala's reincarnation that Tamala and Tatla are given back their heads after both being portrayed acephalically. The viewer is encouraged to glean from their characterization that Tatla is somehow simultaneously an evolution of Tamala as well as her ancestor. More uncanny than cute, Tatla appears as a towering, robotic feline figure, ascending a futuristic, noir cyberpunk metropolis throughout the first half of the film. Her tail a wire, her character design is where species meet: she conjoins the materiality of a robot, the figure of a human, and certain features of a cat. Voiced by Béatrice Dalle in the film's only French-language role, she more explicitly than

11. Professor Nominos is, as it would appear, cute Michelangelo's future form (his full name is Michelangelo Nominos). Later, the two meet as the elderly Nominos reveals to his past self the plot on Tamala's life. What's pertinent to this article is that Nominos, like Tamala, also lives forever. However, his flesh rots and he trails maggots everywhere, including onto Michelangelo's couch. This decay provides a foil to Tamala's own eternal life by emphasizing her neoteny and renewal.

Tamala invokes the figure of a gynoid. Her ancestrality, on the other hand, is gestured to in an earlier scene, when we see a headless statue of Tatla that is marked, "Symbol of the ancient religious cult of Minerva, suppressed approx. B.C. (Before Cats) 4000 [.] A Goddess destroyed and reborn in infinite succession, according to legend." Tatla, according to Professor Nominos, is a goddess of communication. Through the conspiracy, he posits that she controls the postal system, phone lines, fiber optics, and the REM sleep of children under the age of one. And so scenes of Tatla are cut to when Tamala dreams. The viewer is also frequently reminded that Tamala is robotic herself, even as her figurative image is positioned beside the three-dimensional Tatla. This dyad of Tamala-Tatla is riddled with features of heterogeneous technical regimes that also link them together in a shared genealogy.

Even though we are encouraged to think that Tatla is Tamala's predecessor, this priority confounds what we know about their technicity, as Tatla appears in the more "advanced" mode of 3D-CGI. The dyad of Tamala and Tatla stages a problem of priority and reproduction: *who came first, and by what logic of technical development?* If, as Bataille writes, "reproduction leads to the discontinuity of beings but brings into play their continuity," then Tamala's reincarnation through Tatla demonstrates how technical reproduction complicates any stable distinction between origin and descendant (Bataille 1986, 13). It is not simply that what appears to be constructed by a newer technology (Tatla) might be temporally prior, while what draws on an older animation style (Tamala) might in fact be secondary. Rather, their relation reveals technical forms that do not necessarily precede nor succeed on another, but adapt without a fixed origin.

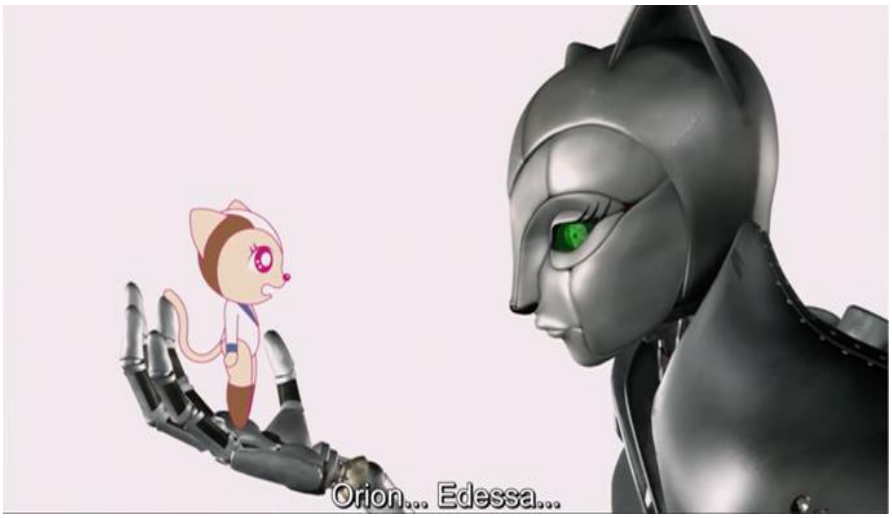

Figure 1. Tamala and Tatla meet. Film still from *Tamala 2010: A Punk Cat in Space*, directed by t.o.L (2002). Screenshot by author.

Now that we have set the scene for the film, I can establish my argument regarding this priority. The techno-animism of Tamala happens in this scene through both representational and material means: the existence of Tatla and Tamala on the same plane reveals an incongruity in their respective imaging techniques. First I demonstrate how these techniques, which so far I have called the two-dimensional and three-dimensional, reveal the image as an *obstructive surface*. Throughout this article, I use the term *surface* not to mark illusion or lack, but to name a zone of technical plasticity—where the image, while reduced and delimited, nevertheless bears the latent capacity to stretch, deform, or reconfigure itself anew. These surfaces are obstructive not simply in their visual flatness or depth, but in their exposure of technical constraints. They form a reference to the techno-animation behind the image, a life force that threatens to break through the screen and reproduce otherwise. The 2D animation, with its planar, superflat logic, initially appears as a limit that can be ruptured by another technical force. Yet the 3D-CGI, when made visible as rigged and rotational, also obstructs: it reveals its own apparatus, its axis-based calculations, and in doing so discloses a different kind of reduction—one that operates under the guise of depth and realism. After Tamala's resurrection, the film returns to its original, flattened plane, but now we perceive this flatness as a choice instead of a default; a surface that retains the memory of other imaging regimes. Yet these distinct imaging regimes share a technological basis at their core: the techniques and the logic of computational modeling. In my analysis of the different regimes used

here, animation becomes not a linear mode of development that proceeds directly from 2D to 3D, or vice versa, but instead two incompatible imaging systems that share one logic. This is what I call the neotenous image, as it reveals two technical tendencies of producing movement that result in an impasse in the development of the image: rather than successive development through different imaging regimes, different imaging regimes are preserved here to exploit their various potentials. It is the technical tendencies of these regimes working in tandem to produce neoteny as a mode of time, that allows the image-commodity to reproduce itself—as we will soon see in Part II.

The sequence of Tamala's rebirth is unusual in its display of technoanimism because the film's titular character in fact *both* represents the mechanical force of images—though in this case it's not only a gesture to the sequencing of frames—in addition to channeling her own vital force, as in Lamarre's description earlier. After Tamala dies, Michelangelo sits mourning her on a bench when an eerie mechanical paw reaches out from underneath. Later we see the same scene repeated with Tamala's own round paw reaching out, as she climbs out from under the bench to reveal that she has been reborn. This visual match implies that the mechanical paw is both her paw and also not, referencing directly a succession that is technical in nature. This succession should seem counterintuitive, considering Tamala herself is already part robot. Another interpretation is that this mechanical paw belongs to Tatla. However, this is even more unsettling in terms of imaging, as it suggests that, in principle, Tatla could inhabit the same 2D realm—and be rendered using the same linework—as Tamala. These parallel scenes bookend when Tamala and Tatla converge in the composite scene, depicted respectively in 2D and 3D. When considering the visual match on Tamala's paw and the (more archetypal) robotic paw, their meeting not only highlights Tamala's status as part-machine but also the technical basis of her rebirth. Between the dyad of giant 3D robot-cat and miniature 2D robot-cat, a theory of technical development appears through the play on dimensionality. In representing the mechanical force of images, Tamala does not simply imply a mechanical *succession* of the biological, in the manner of a stereotypical depiction of a cyborg. Instead, this succession stages in the technical domain a biological impetus, that is evolutionary adaptation.[12] What animates technical succession is in

12. Lamarre differentiates in his piece, "The biopolitics of companion species," between animal-like representations of human populations versus the imaging of those populations. The former says, in the example of Japanese wartime cartoons with little companion species, that monkeys represent the Chinese and bunnies the Koreans. The latter instead sublates the difference among races into species difference, in which there are no equivalents drawn between a certain species and a certain ethnic group. Instead, the sublation of the difference functions as a biopolitical means of integrating the various ethnicities into one mass where difference operates negatively. Tamala does something

fact a vital force, as implied by techno-animism. Because Tamala is not merely portrayed as robotic, but instead channels this vital force through her formal contrast with Tatla, their technical succession should also be understood as a form of evolutionary adaptation.

Central to an understanding of its technical basis, the film comes in the era after the animation stand: the camera is no longer static but simulated; motion is produced by keyframing parameters like the rotation of digital models; and Tamala's digitally animated 2D form is CGI-composited into the hybrid environments she traverses. As such, both Tamala and Tatla are computational images—though Tamala is arguably better disguised, as her scenes are shown with camera pans and a limited style that imitates 2D cel animation. Jacob Gaboury, in his book *Image Objects,* demonstrates how the materiality of the contemporary world is shaped by computer graphics (hence the term *image object*) and vice versa. In so doing, Gaboury attends to the digital apparatus of image-making: he argues that most computational images operate by way of their invisibility, designed as they are to mimic and reproduce the formal elements of media that have preceded them. Because the computational image is arguably the medium that is evaluated exclusively on the success of its disguise, "if an image reads as computer graphics, it has failed its simulation" (Gaboury 2021, 4). Tatla, however, fails in this simulation egregiously. Not only does her character design display her robotic core, but her virtual skeleton is stretched and rotated in an axis—in a direct exposition of the rigging process behind computational modeling (Figure 2).

In this composite scene, where Tamala and Tatla are shown together against a blank background, the hyperbole of both regimes used to create the characters is revealed. Tamala, divorced from her usual milieu, is much more faithfully superflat: the character is no longer depicted in limited linear perspective, which showcases depth in her gliding across the scenery, and this blank space cannot privilege scale between background layers. The composite 2D and 3D image exploits the gap in Tamala-Tatla's characterization in an inversion of depth in the image, to expose their imaging techniques: on the one hand, there is the foreclosure of any depth beyond the surface; on the other, depth operates on a computational plane that has calculated dimensions mathematically across x, y, and z axes—through which lighting and movement emerge. Not only are these direct displays of two disparate technical modes of animation, in which one is supposed to succeed the other, but also displays of two different temporal modes. Let me start with the former.

Tamala's 2D modality might appear to reference the "analog" animation stand, with the image's plasticity indexing a putatively more

similar here, in which she is not simply representing a robot and a cat chimera, but mediating the technicity between biological and mechanical life.

naturalistic illustration technique, while Tatla's 3D-CGI suggests a more advanced technical force by being explicitly "digital," thus explaining her character's emphasis on the technological and mechanical. To clarify, I'm not arguing that Tamala and Tatla shown together posits a succession of technical regimes where the three-dimensional has succeeded the two-dimensional. In fact, the term *dimension*, which I've been using up until now as a standard name for the 3D-CGI graphics of Tatla's scenes, is misleading: it may conjure up some relation to Einsteinian spacetime or worse, evoke the idea that the perception of depth provided by 3D graphics is somehow an expansion of the two-dimensional. Rather, there is a technical difference between these two types of images that is based on their divergence in perspectival technique—or in the distinct ways they play with it. Tamala's monochromatic milieu in the majority of the film is flat and limited in its reference to classical animation, but when she encounters Tatla, the scene is injected with color, pushing the image into an overtly superflat style characterized by the collapse of depth cues and heightened surface effects (Figure 3). This momentary production of an unambiguously superflat image can be read, following Murakami's original intentions, as *nonperspectival* in being non-Cartesian—its 2D imaging rejecting classical linear perspective.

However, Lamarre has critiqued Murakami's understanding of the superflat as oppositional to Western geometric perspective: Lamarre posits that the superflat relies on an *orthogonal logic* of depiction, rather than a lack of one (Lamarre 2009, 120). The latter uses diagonal lines to divide the image into a set of planes, such that depth is imparted through proportional reduction and overlap. This, importantly, forms one obstructive surface and logic of seeing. In a statement evocative of the Deleuzian surface, Lamarre points out that in the idiom of the superflat, "depth appears on the surface" (Ibid., 110). Consider Figure 3, in which the planes of Tamala's room appear as if converging on the single point of Tatla's eye peering through the window: this logic is disrupted by the other objects in the room, most easily seen in orthogonal edges of the bureau and books. Color is made use of here in such a way that all objects in the scene are homogenous in their vibrancy. Tatla's eye, the only element rendered in linear perspective, appears oddly situated in its projection of one-point perspective into the room—as if breaking through the flat plane. So Tatla appears to look not at Tamala, but directly at us. The convexity of Tatla hollows out the superflat, exposing its obstruction.

Tatla's appearance in the same scene as Tamala then creates a multi-perspectival, anamorphic image. To show how this image formed using obstructive surfaces creates a temporal problem, I propose that

we treat the idea of anamorphosis in a manner following Jacques Lacan's analysis of Hans Holbein's 1533 painting, *The Ambassadors*. In its mapping of space through linear perspective, Lacan identifies the question of "apprehending a temporal function" or instantaneity, and it is anamorphosis that establishes this relation of vision to time (Lacan 1998, 87). At the painting's bottom center, between the two ambassadors, appears a flying streak. It is only when the viewer turns with a lateral position to the painting, do they see that the streak is a skull. Lacan identifies in this the visibilization of "the subject as annihilated" (Ibid., 88). Holbein's painting explodes linear perspective by integrating it within a new technical paradigm of embodied viewing. In his writing on cinema and animation as coeval paradigms, Lamarre calls anamorphosis the "mutation of one-point perspective," where in promoting its technism, an "impotentiality" of the image is uncovered (Lamarre 2011a, 138). This temporal function in *The Ambassadors* happens through the delay in seeing that is conducive to bodily technique, and thus reveals the technism of Cartesian perspective. The impotentiality in *Tamala 2010* is the coming together of two technical regimes of perspective, one based on orthogonal and the other on linear logic, which exposes a gap between two successive temporal regimes that are coeval. The temporal function of this image is not delay like in Holbein's painting, but neoteny: two developmental tendencies of the image are apprehended simultaneously (more on this soon). This gap is brought to light in the movement that results from these perspectival arrangements.

Particularly out of the ordinary in this scene is Tamala's immobility: when depicted alongside Tatla against a blank background, she merely bobs and floats (Figure 2), and when confined to her room she is bound in *kegadoru* (or "injured doll") bandages, such that the only sign of life is her blinking (Figure 3).[13] The superflat notoriously deals with movement on a lateral plane, in which the lack of emphasis between foreground and background encourages a lateral movement of the eyes across a dehierarchized, still image.[14] Her limited mobility is anomalous in a film about her travels through interplanetary space—and it is in major part her buoyant movement throughout the film that provides the flat planes through which she moves a sense of depth. It's as if her existence in the same image as Tatla must be restricted, since Tatla's ability to stretch and rotate a full 360 degrees operates in a different range

13. *Kegadoru* (ケガドル) emerged as both a medical fetish and fashion trend in Japan around the turn of the century. French photographer Romain Slocombe documented this fetish, in which young Japanese women are wrapped in bandages implying faux injuries, in his book *City of the Broken Dolls*. While I don't address the cute's structure of fetishism as specifically erotic in this article, there is quite obviously an erotic dimension at play in the life of cute objects. This dimension is implicit in my analysis of the intimacy such objects induce. See Slocombe (1997).

14. See Lamarre (2009, 111).

of motion. Tatla, as an avatar of the computational model, generates the sense that she is able to move through any spatial plane—as all of such a model's movements have been indefinitely calculated. Yet if Tamala begins to glide or move in her buoyant way, beyond blinking or bobbing, that movement will disrupt the indefinite open set of Tatla's range of motion. In other words, despite the computational model's ability to generate all senses of movement, thus freeing animation from its limited means, it is Tamala's gliding that exposes a limit in the model's imaging technique. The two technical regimes are thus *both* obstructive surfaces, expressed through their different orientations to generating movement in time. Let me explain.

The two regimes, though visually distinct, interpenetrate each other when considered through the logic of the moving image. While one may appear to be the ancestor or reincarnation of the other within the 2D/3D dichotomy, it may come as a surprise that 3D modeling still operates according to an underlying orthogonal logic. Orthographic projection is a common technique in 3D modeling across engineering, architecture, and animation: it relies on projection based on orthogonal perspective to eliminate depth distortion and ensure uniform, measurable scale. John May calls the electrical (or digital) image-model that comes after drawing "postorthography" (May 2017, 19). Unlike the orthography of hand-drawn images that are predicated on the "linear historical time" of drawings and clocks, May argues that postorthography operates in the "real time […] of statistical thought," as "models contain *simulations* of all possible future drawings." In other words, the computational model needs not to *capture* an already extant object—instead it *constructs* the image-object vis-à-vis calculations of vectors and planes.[15] The computational image is statistical because it anticipates all possibilities of light, shadow, depth, perspective, and even movement beforehand in an unseeing calculation, that later becomes an image. When interpolated into the moving image, as Tatla is, this model provides an imaging regime based in the indefinite time of the open set. The open set of the computer model already begins indefinitely: rather than the capture of a real object, it is based on calculation. As such, it is differential rather than numerical. This shared basis in orthographic modeling, which is statistical and anticipatory in its differential nature, makes it such that the formally divergent dyad of Tamala-Tatla can be generated through the same computational regime—even though they index different potentialities of motion.

The anamorphosis of Tamala-Tatla results in a composite of potentialities and regimes, that share the same technical basis of orthogonal, computational modeling. In the first regime, the imitation of older

15. See Gaboury (2021).

modes of animation results in a planar mode of time based on Tamala's gliding on the surface. This produces the instant of seeing from various perspectives all at once. Meanwhile, Tatla's exposure of the digital model reveals an infinitely calculable temporality that is at odds with Tamala's surficial one.

If Tatla, as she stretches and flexes in this scene showing off the rig behind her production, has exposed the real time of the computational image, it is perhaps easy to argue that Tamala is a computational image in disguise as a superflat, retro, analog image. However, as we have seen earlier with the visual match on robotic paw(s), it is difficult to say which image better or more faithfully captures either organic or mechanical modes of being. To again examine their different logics of motion: Tamala's movements are interpolated expressively in the Bézier curvature of her squash-and-stretch buoyancy, while Tatla's are interpolated exactingly, as she is clearly modeled on the mechanics of the human body with human limitations to movement—limitations that are later deformed with her own stretching.[16] Is Tatla, then, "more organic" because her range of motion is usually more faithful to a human and Tamala's to a toy? Of course not. In the transformation from a newer form of animation that better imitates human motion (Tatla) to an imitation of an older form of animation that plays with deformation more naturalistically (Tamala), and back, we can see that there is an impetus to unite the two under one genealogy, but not where the origin of that impetus comes from.

Moreover, these are two different means of approaching motion with regard to perspective: one which wears its depth on the surface, by imitating an older form of animation; the other by producing a newer mode of animation, while imitating an older form of depth. But both actually proceed from a virtual projection at their basis: there is no view of an object that is orthographic to the naked human eye, as the point of showing an orthographic object is to provide animators, architects, and engineers with scalar measurements. Orthogonal views assume multiple perspectives in both instances, and in the case of Tamala and Tatla the abyss between such perspectives reveals an impotentiality of a statistical, calculable imaging regime. The anamorphosis created here is temporal. This is not to say that Tamala appears on a different plane of time than Tatla, but rather that she exposes the underlying logic of Tatla's mode, as the separation of the image into logical planes (the orthography of Tatla's modeling) is worn on the surface in Tamala's superflat. In other words, Tamala's image asks us to *see* orthographically—despite

16. Bézier curves are used to both form the shape of round objects, as well as "model the smooth movement of objects through space, like the bounce of a ball or the tactile drag of an icon as you move it across your screen" (Ibid., 94).

the fact that Tatla's image has exposed the orthographic technology that is computational modeling.

Tamala's immobility gestures towards a potential in her movement that promises to break through the total set, when composited with an image in which all space and movement are infinitely calculable. It is her movement's contrast with Tatla's that exposes the impotentiality of an image that anticipates all possibilities. There is thus a potential activated in their composite image—that is, through what is properly cinematic in the synthesis of these images—that opens the image up to adaptation and return. In the composited cinematic image, object simulation falls away to privilege a temporality that becomes other than the time of the apparatuses that produced it, that is, the time of computation and statistics. This potential of cinema is echoed in the earlier shot of the swaying trees, which gestures to the idea that animation and cinema are not discrete or sequential forms, but rather coexisting tendencies that mutually adapt the other. To ask which came first—Tamala or Tatla, the organic or the mechanical, 2D animation or 3D modeling, cinema or animation—would lead to an abyssal problem of genealogy.

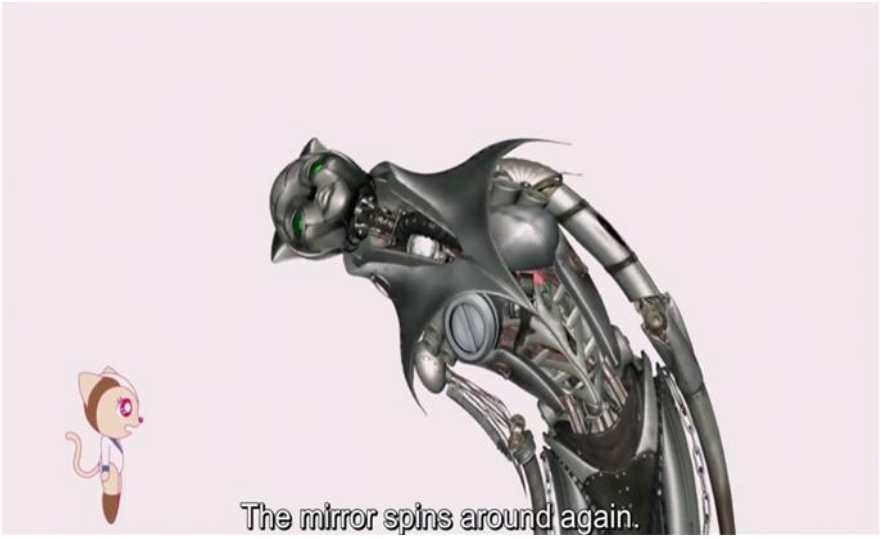

Figure 2. Tatla shows off her own stretchiness.

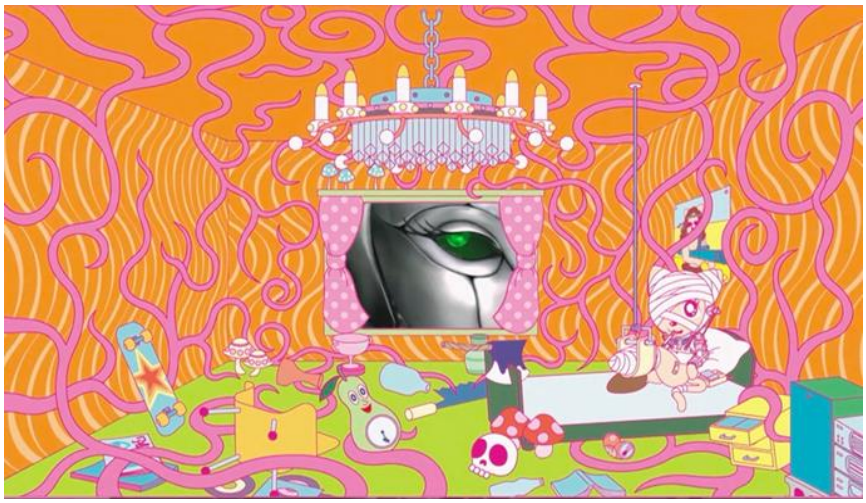

Figure 3. Tatla peers into Tatla's room, which is rendered in superflat style.

To sum up, the anamorphosis that occurs in *Tamala 2010* posits two technical regimes of animation as a transformation of one *into* the other, without a necessary priority of one *over* the other. Also diegetically speaking, we should recall that 3D Tatla is reincarnated as 2D Tamala in order to bring the cult of Minerva back into power through the monopoly of Catty, to the point where Catty and Minerva become another dyad that keeps reproducing itself in time. At the narratorial level too, an originary progenitor is perpetually referenced without any originary moment. The image is flattened back into cute Tamala only to restart the cycle of her rebirth, rather than to show Tatla as her evolution or final form. Tatla is both supposed to generate Tamala, as well as become her successor. The diegetic idea that Tamala is not only reincarnated *by* Tatla is mirrored at an extra-diegetic level, where both emerge from the same orthographic modeling regime, in that she is also a reincarnation *of* her. They are both 'newer' forms of animation that, in their alternative forms of depiction, poorly hide that they share a one technical basis.

Cute is therefore not an original locus nor a telos of technical development; instead, it is an aesthetic that captures a modality of development that can be called neotenous. This modality happens *between* individuals rather than through them, which is why the dyad is a necessary form here. While the concept of neoteny remains debated among evolutionary biologists, who first proposed its definition as the retention of juvenile traits in adulthood, neoteny's appearance in animation is well documented. Stephen Gould, for example, described how characters like Mickey Mouse appear to age in reverse, looking younger and

younger in their appearance over time (Lamarre 2011b, 122). Repurposing this idea to show how the nonhuman animal in anime captures a politics of life, Lamarre proposes a conceptual shift from "cute" to "neoteny" in order to understand cute as a "process and potential" rather than an enumeration of features (Ibid., 126). He writes, "Neoteny implies a cuteness that is not simply cute. It implies an evolutionary force or process that is nonlinear, nonteleological and immanent to the organism […] What is more, neoteny entails a surplus or excess that crosses species" (Ibid.). Neoteny is a form of adaptation that is not about succession. It would be more accurate to describe neoteny as the retention of anachronisms that allows for a new individual to form without classical reproduction—like the budding of saltwater hydrozoans, the schizogeny of protozoa, or a starfish growing a new arm.[17] Likewise, Tamala and Tatla emerge from the same stolon, that is the computer. To further this concept in terms of technicity, the animated image itself captures a modality of development alternative to the character design of nonhuman animals and the figure of the robot, which should be dismissed as a fantasy of the technical object anyway.

The neotenous image is given to us in *Tamala 2010* not solely as a style or in the traits of character design, but as a temporal form that reveals the technicity of the image. It captures the simultaneous retention and recombination of several distinct imaging techniques that reference historical modes of producing an image: the limited motion of the orthographic superflat, the sliding planes of 2D animation, 3D computational modeling, and even photographic cinematography—all mixed together without resolving them into a clear sequence of development, nor integrated so that they all become components of a cohesive image. Rather than a linear evolution of media, the neotenous image dramatizes a recursive adaptation, wherein the difference between "older" and "newer" modes becomes confounded through computational simulation. However, the new composite image retains the active potentialities to transform the image otherwise. This technical neoteny is above all foregrounded in how the image becomes cinematic in its movement, and what kinds of temporality it presupposes. By staging two different interpolations of movement—the statistical smoothness of Tatla's rigged CG body and Tamala's Bézier-curved bounce—the film makes visible the various tendencies of animation-cum-cinema. In this way, the neotenous image reveals an originless technical succession that mirrors the commodity form's own endless rebirth: it is cute not because it is new, but because it promises to stay new, indefinitely.

What the cute gives us in Tamala is an exact formulation of the temporal protocol proper to neoteny: a constant redoubling of a lack of origin

17. See Simondon (2020, 201).

as that origin's constant renewal. We've seen how in *Tamala 2010*, neoteny is a form of adaptation that not only refers to developing biological traits, but also technical ones. The deployment of neoteny in Tamala is a way to grasp the pluripotentiality of a being coming into formation in the process of technical development.[18] Neoteny's aesthetic dimension, which is still crucial for understanding how such development appears, is what I have so far referred to as the cute, surficial image. As such, neoteny in *Tamala 2010* demonstrates a form of originless adaptation that is indefinite but not eternal. Moreover, it is indefinite *because* it is originless: neoteny requires the (dis)continuity of the image's reproduction to persist as a set of anachronistic tendencies that can be exploited at any point. On screen, violent sacrifice is this image's engine of asexual reproduction. Technical neoteny, while promising intimacy, is not sexually reproductive: the image must be reproduced in its *consumption*. This promise of continuity amid violent sacrifice is both what converts cuteness into an aesthetic register of neoteny, and furthermore, what makes the mode of neotenous development proper to a capitalist political economy.

This technical neoteny differs from the neoteny of strictly biological life: the pluripotentiality of technicity in *Tamala 2010* is determinative of her alienation as a commodity. What makes Tamala, the brand that is inseparable from the character, endearing is that she will perpetually be cute and one year old—and that her potential will always be tapped into for her renewal as a commodity, through the commodity's rebirth. Neoteny here isn't wholly indeterminate potentiality; what makes the neoteny of the technical-object-as-commodity cute is that it promises its continuing existence in the face of violent sacrifice. The promise of life channeled through the cute commodity is one of intimacy, which is not merely a paradox to its partner, alienation, but the engine that produces alienation. The resilience of the image-as-technical-object should not be seen in a vacuum, but as an adaptation of such an image to and as a species of capital. It can only maintain itself by tapping into neoteny as a technical mode of development.

II. Intimacy and Alienation of the Image-Commodity

Tamala 2010 self-parodies. It both incites and thwarts any easy readings of its plot as a conspiracy of consumptive desire, begging for some

18. For the pluripotentiality of neoteny, see Ibid.
In the afterword to Muriel Combes' book on Simondon, Thomas Lamarre points out that neoteny is not a "literal movement backwards in linear time," but "one way to grasp concretely the role of pluripotentiality or preindividual being in the context of evolutionary development." See Lamarre's "Afterword: Humans and Machines" in Combes (2013).

academic analysis on the cute commodity circulated under capitalism.[19] In the flashforward I alluded to earlier, Professor Nominos gives a lengthy exegesis of the first half of the film in a presentation titled "Circulation and Negative Theology in the Age of Capitalism: On the Affinity between Catty & Co. and the Ancient Cult of Minerva." Again, it is here that he conspiratorially expounds on how Tamala must perpetually be sacrificed and then reborn, thus remaining one year old interminably. Nominos uses the fact that Tamala has appeared as a mascot in various advertisements since 1869, and sporadically over the next 150 years, to explain how Catty & Co. has become synonymous with the cult of Minerva. Tamala's rebirth fuels the dual agenda of propagation and return to her real mother on Orion. She promulgates the consumption of Tamala-branded products wherever she goes in her voyage of attempted return to her origins, upon which the film hints that the capitalist project will have been completed and thus terminated. Indeed, the desire to consume in *Tamala 2010*—as well as to consume Tamala herself—is portrayed as a search to retrieve a lost intimacy with the universe, what Bataille has described as an attempt to manifest transparency in the world that has separated beings from things (Bataille 1991, 57). This separation is what characterizes the economic order of commodities outside the realm of sacrifice, which are exchangeable only in the profanity of their utilitarian relation. Sacrifice, by contrast, resacralizes things (Bataille's example is slaves) as participants in being. In the realm of sacrifice, the separation between beings and things is temporarily returned to its intimate, unalienated state.

The film is populated with a dizzying array of overt references to film, literature, and advertisement: Tamala is seen holding Franz Kafka's *Metamorphosis* as she falls asleep in the museum of extinct animals; the Minerva cult operating as both a postal service and corporate monopoly directly borrows from Thomas Pynchon's *The Crying Lot 49;* Stanley Kubrick's infamous bloody twins from *The Shining* have a cameo; as does Kentucky Fried Chicken's mascot, the Colonel, with an axe through his head. However, one crucial covert influence that undergirds major plot points is the work of Bataille. With his secret society of sacrifice aptly named *Acéphale* ("headless") and his writing on economies of sacrifice that exploit excess in *The Accursed Share*, it appears as no coincidence that both Tamala and Tatla are depicted headless prior to the former's resurrection. Bataille's Acéphale is simultaneously

19. Choose-your-own-adjective capitalism (cybernetic capitalism, carceral capitalism, platform capitalism, slop capitalism, etc.) has been a trend in academia for quite some time now. More than ever, this diagnostic seems less often to periodize changing relations of production and more often as a signal of individual academic branding and following this, neologism coinage.

anthropomorphic and incomplete, man and God, ecstatic and agonized—just like the Tamala-Tatla dyad.[20] The cuteness of Tamala herself, Emily Raine has proposed, represents both the profanity of utilitarian consumption, as well as its sacrificial object (Raine 2011, 200). Because Tamala's sacrifice serves to maintain and reproduce Catty & Co.'s hegemony, her expenditure as the excess or "accursed share" is necessary to ensure future returns. Not only does she return, reincarnated, but she also brings about future returns, economically speaking, as a consumable commodity renewed for continued circulation.

Here I interject to address the parable of the film: while the reel (or filmic) Tamala is a commodity, her character has followed in the footsteps of her animated predecessors, whose displaceability from the cinematic frame enables their merchandisability as toys, candies, and other goods. It's no secret that the popularity of a character helps to fuel their future appearance on screen. The process of Tamala's imaging already carries her status as image-commodity to real life. A parable is not a metaphor: the reel Tamala and the real Tamala coincide in their reproduction. This is what I henceforth call the image-commodity. It will be expounded upon soon, in a reading of Marx's oft-cited passage on the commodity fetish.

Tamala the character, like all commodities, is a mystified index of social relations: her form obscures the labor and technical conditions that produce her. Unlike all commodities, the film exposes the remediation of those relations as a step normally thought to be subsumed within mystification. The film stages those social and technical relations through the neotenous image and its production. In what follows, I extend this logic through the figure of sacrifice—not as a narrative motif, but a structural operation that visibilizes the commodity's reproduction in its destruction and rebirth. Sacrifice becomes a privileged instance of experiencing intimacy between human and commodity, which, following Bataille's reuptake of Marx, also becomes a moment of *adequation* (the alignment of man and thing). I argue that the liberation produced by sacrifice, wherein the categories of subject and object are momentarily undone, is not a reversal of alienation, but its adaptation. Through neoteny as a technical mode of production, sacrifice allows capital not to transcend alienation but to exploit it, incorporating rupture as part of its continuity. This brings us back to what I call the "intimate alienation" induced in *Tamala 2010* through the effervescence of her

20. In "The Sacred Conspiracy," an article for *Acéphale*, Bataille writes, "*Human life is tired of serving as the head and reason of the universe. To the extent that it becomes this head and this reason, to the extent that it becomes necessary to the universe, it accepts servitude."* See Bataille (1936). *Emphasis in original*.
For the contradictions embodied by the Acéphale, see Biles (2020, 221).

character's techno-animism: the commodity appears alive and endearing, but solely in order to reproduce its own disposability.

Tamala is a brand, an anthropomorphic robot cat, a commodity designed for consumption. Unlike Hello Kitty (whose lack of mouth, according to Sanrio, is so that she can "speak from the heart") and contra Marx's joke of the speaking commodity, Tamala is a *thing* that is given speech. This is underscored in the film when she delivers one of her signature kicks-in-the-head to another cute kitten who only utters a refrain of a child's song, "la-la-la." Tamala may be infantile, but she is not *that* kind of cute: she is a commodity that speaks, and her vitality is conveyed in the casual profanities she tosses off ("fucking goodbye"). In this capacity for speech, she also has a favored refrain: "Wait just a moment longer." Yet this phrase begets action rather than waiting. While it surfaces repeatedly (in a postcard delivered by the postal cat, in Tamala's dreams of returning to her home planet Orion, and during her final encounter with Tatla) it never culminates in fulfillment. The film ends not with Tamala's homecoming, but with another moment of indefinite deferral, a loop coiling back on itself that restages the beginning. The utterance is both a mandate to the viewer, and a mantra for Tamala herself, of a deceptively short duration—a moment—that can be telescoped outwards into an interminable cycle of rebirth.[21] Here we can add one more "part" to Tamala's robot-cat-girl assemblage, the part that is alien. Her deferred encounter with her home planet is alien not only in the extraterrestrial sense, but also in her perpetuation of herself as a commodity, expressing that Tamala is "an alien object exercising power over [man]" (Marx 2007). We have now seen in this section how an origination problem is also an alienation problem: Tamala cannot return home. I now turn to Marx and Bataille to show how this alienation is a structural component of the image-commodity itself, one that enables its endless renewal.

Marx's joke of the "soul" of the commodity, in the same register as his subjunctive invocation of a commodity who "speaks," forewarns the reader against attributing an inherent value to the *thing* (as one does in the oft-quoted case of commodity fetishism) (Marx 1976, 176). Marx claims that it is due to the commodity's own reflection of a social relation between labor onto a social relation between objects that a mysterious substitution happens: "Through this substitution, the products of labour become commodities, sensuous things which are at the same time supra-sensible or social" (Ibid., 165). We should note that Marx makes two technical analogies in the sentences that directly follow:

21 Tatsumi Takayuki points out that Tamala's waiting is enlarged into what she describes as the "incredibly lengthy drama of Death and Resurrection." See Takayuki (2006, 76).

> In the same way, the impression made by a thing on the optic nerve is perceived not as a subjective excitation of that nerve but as the objective form of a thing outside the eye. In the act of seeing, of course, light is really transmitted from one thing, the external object, to another thing, the eye. It is a physical relation between physical things. As against this, the commodity-form, and the value-relation of the products of labour within which it appears, *have absolutely no connection with the physical nature of the commodity and the material relations arising out of this*. It is nothing but the definite social relation between men themselves which assumes here, for them, the fantastic form of a relation between things. In order, therefore, to find an analogy we must take flight into the misty realm of religion. *There the products of the human brain appear as autonomous figures endowed with a life of their own,* which enter into relations both with each other and with the human race. So it is in the world of commodities with the products of men's hands. I call this the fetishism which attaches itself to the products of labour as soon as they are produced as commodities, and is therefore inseparable from the production of commodities. (Ibid.)[22]

In the instance of the commodity's genesis, it is delinked physically from the material relations that birthed it—labor and human life. Despite his mocking tone, Marx incessantly animates the commodity in his description. Ngai likens Marx's "If commodities could speak, they would say…" line to asking his reader to imagine as if commodities were like child actors on a stage, a personification of cute that he both wants to highlight his disdain for, but can't help using (Ngai 2012, 61). A similar animation of the commodity happens above, in which Marx highlights their autonomy and expression.

In this passage, Marx deems his first analogy insufficient, as the optical is a shared perception based on a physical relation. The second is more apropos, as the religious is for him a shared delusion that nonetheless informs our social relations, while mystifying them. Here he leaves something unsaid: the second analogy is also based on imaging, as it is a hallucination that overlays the world in a misty delusion. However, this delusion has material consequences on the world itself. The insufficiency of the first analogy lies in the obvious fact that *worlds produce images*, whereas the second works for the commodity because it relies on *images that produce worlds*. The commodity is the latter while purporting to be the former. This is no mere mystification or a trick that promises to reveal something, only for one to discover that there's nothing underneath. Its implications are sensuous and material—like Marx's description of the fetishism that dupes the worshipper into thinking the object of worship will reveal its true character. The commodity's secret lies not primarily in the obfuscation of labor, but in its

22. *Emphases mine.*

absence of expression and its lack of universal value based on its inability to communicate its intrinsic value.[23] This conflation of the two metaphors in Marx's own critical desire to uncover the fetish causes him to miss that there in its absence of expression and its lack of speech is an *imaging surface*. This surface promises animation and beckons its admirer to desire it, to bring it close, to use it.

To understand better how this imaging surface operates, Tamala is a perfect progeny from Marx's misty realm of religion, as she is serene and Christlike in her eternal sacrifice (Figure 4). In the sequence where she is resurrected, the film depicts her crucified, her eyes closed and feline mouth curled (as usual) into a tranquil smile. This image draws incongruously together the cute and the Christian into a tableau of placidly received suffering, underscoring how a corporeal vulnerability is the precondition for forming intimacy.[24]

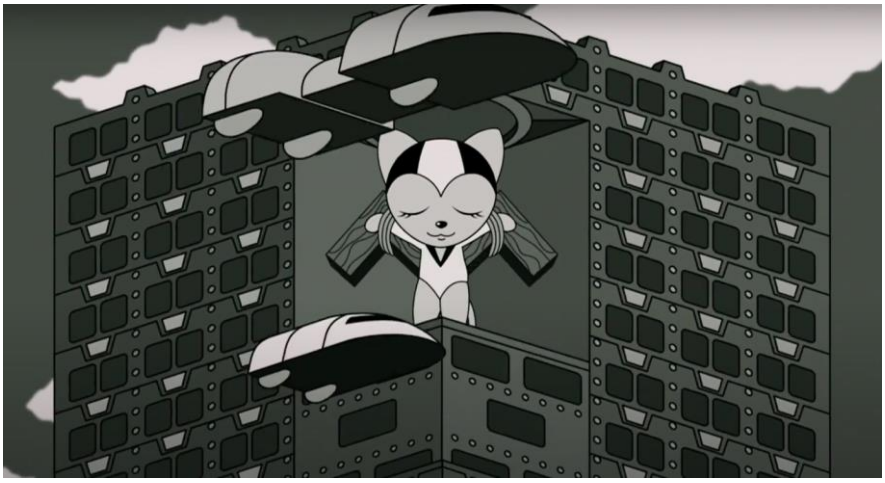

Figure 4. The passion of Tamala.

Bataille, in his opus describing economies of consumption and sacrifice through religion, maintains that intimacy is not expressed by a thing,

23. I borrow the idea of a "commodity who speaks" from Fred Moten's reading of Marx via Ferdinand de Saussure, but I use the idea in a very different context than Moten does. Importantly, Moten makes this observation in the context of the Transatlantic slave trade, where the turning of African slaves from bodies into flesh takes on an ontological dimension with resulting implications for the afterlife of slavery. See Moten (2003, 13).

24. Elizabeth Howie describes the parallelisms of the ascetic body and the cute in her chapter, "Indulgence and Refusal: Cuteness, Asceticism, and the Aestheticization of Desire" in Boyle and Kao's edited volume (2017, 19).

except when it is "essentially the opposite of a thing, the opposite of a product, of a commodity—a consumption and a sacrifice" (Bataille 1991, 132).[25] Since intimacy is part-and-parcel of consumption, intimacy is the negation of a thing-as-commodity. This tracks with his pivotal argument about Aztec sacrificial economies, namely that consumption of things is the way that separate beings communicate with—that is, intimate to—one another. But this, for Bataille, is a problem. He writes, "Everything shows through, everything is open and infinite between those who consume intensely. But nothing counts then; violence is released and it breaks forth without limits, as the heat increases" (Ibid., 39). If nothing counts, violence and thus intimacy have the threat of becoming banal. To counteract this threat, violence must be sanctioned and funneled into sacrifice. The victim of sacrifice, identical to the thing in its consumption, is "given over to violence," given over to intimacy and rid of thinghood for good. Here Bataille's sacrificial economy draws a strange *adequation* between man and thing, in which sacrifice turns man into a thing to be consumed.

In the context of capitalist modernity, Tamala's sacrifice marks a shift from sacred expenditure to Marxian alienation: here, sacrifice strips the commodity of its *exchange value*, reducing it to pure *use value*. This might seem at odds with Bataille's description of "use," but we should note its context. Bataille first deploys the term to distinguish the victim's surplus status from "the mass of *useful* wealth" (Ibid., 59).[26] We should recall here that for Marx, the commodity is a contradiction in its unification of use value and exchange value, two oppositional entities. Whereas use value is "only realized [*verwirklicht*] in use or in consumption," exchange value appears relative in how commodities are exchanged and serves to extinguish the commodity's "sensuous characteristics" (Marx 1976, 126-128). While its reality as use value can be revealed by its exchange relationship once the commodity has come into circulation (what, in the language of neoclassical economics, would be called its utility-function), Marx is clear that a thing can take on use value without exchange value—something, he says, unmediated by labor. The purpose of *removing* a thing from exchange, then, is so that it takes on use value in the act of consumption.[27] The ontology of the commodity comes into being by fusing the two values and appearing as if

25. Here Bataille describes the church as a thing, "little different from a barn," impenetrable and without meaning other than through its materiality. However, through the correspondence of the church to the "needless consumption of labor" and thus its destruction, its intimacy is expressed.

26. *Emphasis in original*.

27. The commodities that workers purchase with their wages are distinct from assets in that they allow the worker to subsist through consumption, rather than through investment or accumulation. This distinction is what allows Marx to map the class relation onto the logic of when use and exchange values manifest themselves.

the paradox it embodies by doing so is "natural." Sacrifice thus temporarily rescues use value from exchange value: it turns the human into a thing and the thing, however briefly, back into a human.

Bataille takes this logic further in his heterodox reading of Marx, where he reframes the adequation between human and commodity through the Calvinist deferral of man's encounter with intimacy into another world. He argues that Marxism inherits the technical rigor of Protestantism to pursue "clear and distinct knowledge of things," while implying that returning man to the "intimacy of his being" can be achieved through liberation (Bataille 1991, 135). While most interpret liberation to mean "freeing the world of material obstacles," Bataille points to a much-overlooked part of Marx: "It was by going to the limit of the possibilities implied in *things* (by complying with their demands without reservation, by replacing the government of particular interests with the 'government of things,' by carrying to its ultimate consequences the movement that reduces man to the condition of a *thing*, that Marx was determined to reduce *things* to the condition of man, and man to the free disposition of himself" (Ibid.).[28] If the adequation of man to things was perfected, they would no longer enslave him. Then man would be able to finally stop putting things between him and himself. In other words, Bataille shows through Marx how freeing the world from all that which is extraneous *of* things is also to free the world from that extraneous *to* things. Marx's critique of capitalism, Bataille concludes, is not that things are now liberated from man, but that they're liberated "without rigor" and any other end besides chance and private interest (Ibid., 136). By rethinking *man-enslaved-by-things* to *things-enslaved-by-man*, Bataille means to show how an adequation between man and thing, in man's "return" to thing, is the capitalist form of sacrifice that milks the thing of its presumably mute intimacy. What Bataille has shown through the commodity is that the fetish denies that there is vitality on both sides of its mute expression—the techno-animist and the strictly human—through the mastery that the latter must express over the former. The distinction between the commodity and the consumer comes to a head in a sacrificial instance: there can be no exchange if all things are interchangeable.

My detour through Bataille recasts sacrifice in a capitalist context, where it no longer negates use in a sacred or unproductive sense. Instead, the commodity sparkles with the promise of intimacy and vitality. Through the profane, nonrigorous liberation of things, sacrifice becomes

28. *Emphases in original.*
Fascinatingly, in the English translation by Robert Hurley, the closing parenthesis is omitted here. Whether accidental or not, this lack of closing parenthesis turns a potential side note into a definitive juncture of Bataille's analysis of Marx.

a mode of reproducing alienation, now mediated by the techno-animist intimacy of the cute, animated, and seemingly autonomous image-commodity. In the conspiratorial world of *Tamala 2010*, this liberation helps to explain why the Minerva religion transforms into the monopoly Catty & Co., which makes Tamala ubiquitous through the commodification of her image in advertising. The imaging regime of the film, on the other hand, enacts this logic of the speaking, dying, endlessly returning commodity as a mode of technical development that I have called neotenous. This transition from sacred to capitalist sacrifice is not just narratorial, but hinges on a shift in technical regimes. The very processes that produced Tamala as an animated figure are also what enable a historical mutation: from intimacy as a temporary resolution to alienation, to intimacy that persists *within* and even *as* alienation itself.

In his description of Aztec human sacrifice, Bataille writes that the victim's "destruction rids him of his thinghood" and eliminates "his usefulness once and for all" (Ibid., 60). His throughline between Aztec sacrifice and Protestant, capitalist sacrifice is made through the former's adequation of man-to-thing, and the latter's adequation of thing-to-man. While the earlier type of adequation is preserved in the later one, how this preservation happens in capitalist sacrifice is through the *animation* of the commodity—which as an image, animates the world. To put this differently, the more primordial adequation between man and thing adapts in a capitalist sacrificial economy, tapping into the intimacy that results from the former to forward the alienation of the latter. All commodities must be images today.

The alienation that results from the animated image-commodity preserves itself through the perverse intimacy of its sacrifice. Whereas Marx provides us with an understanding of alienated labor from the human side, I follow the French philosopher of technicity Gilbert Simondon, who appends Marx, so that I can buttress this idea of the technical life of the commodity. Simondon claims, "The technical object, taking the place of the slave and being treated as such across relations of property and custom, has only partially liberated man: the technical object possesses a power of alienation because it is itself in a state of alienation" (Simondon 2017, xiii). Here, the technical object's consolidation of human, nature, and machine may assuage a certain alienation of the human to others of our own species (implied in Simondon's invocation of the supplanting of slave economies), but it further entrenches our alienation from production and its process through the technical object's own alienation. For Simondon, alienation is not simply crystallized in the processes of production and commodification in general, but also from within, when there is a rupture between the technical *knowledge* of production and the *use* of machines as the means of production (Ibid., 250). Alienation here is conceived of as a segregated relation, rather

than a severed one, that is exploited by the capitalist into knowledge and use.[29] Due to this segregated relation, the alienation of the technical object results in the expropriation of the fruits of the worker's labor, not the other way around.[30] To restate Bataille's sacrificial economy in a different register, the liberation of the human-as-worker is bound up with the liberation of the thing-as-technical-object.

The logic of alienation so far hinges not only on political economic or symbolic cycles; as the presence of Tatla continues to remind us throughout the film, it is technical processes that make them possible. The technical object is part of a co-evolutionary process that anticipates the human in its development, rather than an instrument that simply bends to human needs. While Simondon's famous example is the Guimbal engine, in this case I have foregrounded the animated image itself as a technical object, and *Tamala 2010* dramatizing its development. Technical objects then shape what the human becomes, preserving earlier capacities and tendencies in forms that adapt forward and refer to a mutual origin, that human and object keep positing in their *relation* to one another. This is how technical development, or this shifting relation, is neotenous: it retains juvenile or budding forms that remain malleable, allowing the system to adapt self-referentially without full resolution.

But this open-ended potentiality doesn't guarantee freedom. In the context of capitalist production, it becomes a means of reproducing alienation. To paraphrase Simondon, alienation occurs when technical objects are severed from the conditions that once supported the grounds of their becoming (he calls this the associated milieu) and are replaced by systems of labor segregation and standardized mediation.[31] We can conclude that the becoming of the technical object within the conditions of capitalist production far from precludes overcoming its original impetus—alienation. Technical adaptation persists, but in forms that now serve crisis endurance and commodity reproduction; Tamala included.

Tamala 2010 stages the neotenous image as the engine of a capitalist sacrificial economy, one in which alienation and intimacy are not opposites but dialectical forces that prolong its existence as a commodity. By splicing together two divergent imaging regimes—superflat 2D animation and 3D-CGI modeling with an exposed rig—the film utilizes their incompatibility as potentialities for further development. This incompatibility becomes the site where technical alienation both mirrors and

29. For more on how alienation provides a pivotal conjunction between Marx and Simondon on human relations with technical objects, see Fritz (2021).

30. For the question of alienation as a result of technicity, as well as the development of cinema as a technical object, see Hackett (2015).

31. Simondon describes alienation as a break in which "the associated milieu no longer regulates the dynamism of forms" (2017, 62).

drives economic alienation. The problem of origin, which earlier was introduced through the relation between Tamala and Tatla, returns as a structural feature of alienation: Tamala in and as image-commodity is endlessly sacrificed and made anew, suspending the question of priority in favor of perpetual adaptation. On the one hand, Tamala's eternal reproduction is the invocation of intimacy that happens in violent sacrifice, resulting in the adequation between man and thing. This is neotenous, as an instance in which the image of the thing is liberated from its exchange value and retains its originary thingliness. Yet, her sacrifice exactly prolongs this segregated labor relation that can be called alienation, when exchange and use values are reunited in her rebirth. What makes Tamala endearing is that she will perpetually be cute and one year old, and that her potential will always be tapped to renew herself as a commodity through the commodity's rebirth. Tamala's image is liberated through a form of sacrifice that adequates human and thing by adapting the human to technical alienation.

Rather than excising economic alienation, technical alienation and human alienation become mutually entwined and thus perpetuated via their adaptation to and through one another. Neoteny isn't an indeterminate potentiality *because* of its promise of continued existence. Rather, this continued existence is secured in the successful adaptation into an image-commodity; one that preserves multiple developmental potentials through, rather than in spite of, its segregated relation to labor. This makes the potential that is in neoteny *determined* in the sense that it will mandate the endurance and development of intimate alienation—as an internal contradiction of capital's mode of production. The conceit of *Tamala 2010* is that when commodities speak, they only have a single utterance: Wait just a moment longer.

Acknowledgements

Thank you to Devin Wangert for providing me with the incessant discussion of, and adding sparkle to, these ideas. The use value is inexchangeable, and above all invaluable.

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Biography

Xindi Li is PhD candidate in History of Consciousness at the University of California, Santa Cruz, and senior lecturer in Film and Media Studies at the School of Advanced Studies, University of Tyumen.