

ANIMATION AND ITS “ALREADY-SEENNESS”: DEATHLINESS IN THE ERA OF AUTOMATION

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Exploded-diagrams of Deathliness, 2020, video 6 min, 30 sec. Courtesy of Big Window.

Image description: Two soft-pink, computer generated creatures are in a black space. They are viscous. One is flattening on the ground and the other is in midair.

BIG WINDOW

Delivering the final blow to an opposing fighter in *Mortal Kombat 11* yields mixed results: a decapitation may spew blood onto the in-game camera watching the battle unfold. Or one can disjoin in real time, a trope of the franchise: a character tears through the mid-section of its opponent, causing their body to come apart at its seams, disclosing a neat cross-section—a spine encased in plasma, or internal organs drifting neatly upward from the player-character while bits of blood and guts hit the lens. The camera pauses and a voice screeches a victory message at the precise moment of fatal impact, when the scene is foregrounded by a bloodied and gravity-defying severed arm or spine-lash. The continuity of time and space is reconfigured before us as anatomical parts become heavenly bodies drifting towards the camera.

The game relies on strong simulations to produce the illusion that its bodies are filled with human-like sinews and guts. But the designs lack functional bones and muscles—they are pure surface. These “meshes”—collections of vertices, edges and faces that define objects—describe anatomical form purely topographically. Smashing through a character emits a flip-book of innards from the area of impact, cheating the idea that they have fluid inside of them. The end results are images that look like an exploded-parts diagram: eyes slickly bulging atop sockets, ligaments floating farther and farther away. This carnal diagram is more than an abstract death schematic, however; it becomes a gory field of virtualities captured by a camera that can be anywhere at any time. We can be behind a cracking skull; at the very tip of a cleaver that’s just been drop-kicked into a decapitated enemy; or watching the still-beating heart of a grizzly ogre come to a complete halt. All this clever modeling strives to achieve maximum visual impact, while using as few computational resources as possible.

With this much attention paid to detail, it’s not surprising that *Mortal Kombat* inaugurated several Congressional hearings on video game violence in the early 1990s.¹ But what do these scenes depict, exactly? When these game-ending fatalities defy camera conventions, releasing undefined computer-generated blood in the process, what are we actually seeing?

What we are seeing is the uneven aggregation of shapes, materials, lighting effects, and laws of physics. We are also seeing the combination of traditional cinematography and the properties and codes of live-action cinema (e.g. lighting, depth of field, blur, etc.) being applied to a digital environment. We are seeing the work of scientists in the computer graphics industry (CGI), much of which strives to articulate realism in the realm of simulation. All this amounts to a highly uneven realism, or what Lev Manovich refers to as a “synthetic realism.”²

1 The franchise is also the reason we have the Entertainment Software Rating Board (ESRB) game-rating system in place today.

2 Lev Manovich, *The Language of New Media*. Boston, MA: The MIT Press, 2002.

There is a peculiar way in which this synthetic realism is far less visceral than its "realism" purports to evoke, even while showing literal viscera. The glittery sheen of bodily implosions produces a dampening—even neutralizing—effect that softens the violence, but not because the action itself is unbelievable. Despite demonstrating death, the bone-breaking fatalities do not register as actually fatal. Rather, they register as deactivated afterimages of bodies that were never animate to begin with; bodies constructed as virtual marionettes out of software. Like metonymic exploded-view drawings, these carnal pastiches map the seams of an avatar. They preserve the look of the body, but not the possibility of the relation to its own forces; the bodies, once adequately assembled, do not breathe and are not simulated to do so.

It is not a failure of empathy which underwrites this neutralization—virtual technologies are, after all, not empathy machines—but the presence of a technical condition I call "parameterization." A parameterized subject is an image born out of the infinite parameters built into software. In other words, it is a virtual, nonliving entity comprised of data that carries with it the range of software possibilities in its construction. Backlit by the elasticity of cartoons, as well as by the canonized treatment of immortal flesh in fighting games, the parameterized subject admits that there is no such thing as an authentic body, at least not at the limits of flesh. Like watching computer scripts be deployed, the parameterized subject manifests a pre-configured set of possibilities retroactively fitted onto a model. Bambi and Dumbo could never have died the same way, but Shao Kahn and Sub-Zero, built of and within this parameterized world order, can.

This homogeneity of contemporary screen violence is not merely a result of the "interchangeability" of limbs, blood, or even perfunctory violence, but a function of the parametrized body and its open-ended re-workable potential. This is because the parameterized body is oriented towards a spectator's familiarity with previously depicted imagery. In other words, what is distinctive about the parametric is the "already-seenness" of its imagery—the resonance of familiarity users receive, an interchangeability of action that can be felt and absorbed. The already-seenness of images starts to become culturally omnipresent enough to produce effects in the era of instant image relay.

Specific to the parametrized reality is standardization—for example, seeing a CG animal dying the same way in different movies, or a median shock value established by animated fatalities that are shocking but still palatable. The encounter with death and the accompanying visualization of its dismemberment gets transposed between characters; yet, for those characters' supposed ability to mirror chance, they're already choreographed to take it either way. These representations are the result of either limited computational capacity, the constraints of physics engines to produce novel or highly realistic images, or something altogether stranger.

As a result of the need to meet computational budgets, an industry of downloadable animations exists to fit the function of images whose source

material is original. Despite attempts by visual effects studios to replicate contingency and affect, the parametrized subject is often the amalgam of secondary software, extensions, and pipelines which exist to standardize a single function of animation or the construction of a mesh. To complicate things further, today's distributed and multidirectional media landscape makes it much easier to bring novel aesthetic strategies to market faster thanks to low cost distribution. The new network of image production, where derivative work is the status quo, means that novelty itself is more difficult to eke out of a system in which everything is visible and accessible.³

In fact, the industries around 3D modeling privilege a pipeline that produces the same image qualities over and over, departing from known visual entities in order to, ironically, maximize newness. Too much "seenness" is negative currency, but striking the right balance between accessibility and clever edits puts the viewing subject in novel territory. An aesthetic trope never dies; it is constantly refashioned by the parameters of its seenness. The results of this production-ready topology, though, continually dampen the overall effectiveness of novelty, desensitizing users to it.

For a case study of this "already-seenness," we can return to *Mortal Kombat*, and specifically the game's "blood library." NetherRealm Studios—the developer behind the *Mortal Kombat* franchise—needed to come up with a solution for the depiction of blood that would fit within the computational budget of real-time games. The blood needed to be rendered close to the camera, have the capacity to easily switch from explosive speed to slow motion, and possess believable fluid motion and subsurface lighting. In order to make a flexible system, NetherRealm landed on the solution of building a blood library, an in-game repository of fifteen blood animations. The existing and reusable assets are persistently loaded in-game, fitting within the 155-megabyte budget allotted to the VFX artists on the team. Every fatality and crushing blow in game references this blood library. The end results are a blood graphic that facilitates the experience of *déjà vu* in a viewer, despite the appearance of blood being unique from frame to frame.

This ability to codify and corporatize the bizarre weightlessness of blood, and the subsequent transfer of corporal *déjà vu* to audiences, is only made possible by blockbuster-budget companies with the resources to do so. Adobe's Mixamo spin-off is another example of this consolidation of animation. The primary function of Mixamo is to make downloadable an increasingly vast set of motions across bodies. The technology enables one to purchase ready-to-use 3D characters, rigs, and animations and fit them to any mesh.

Mixamo's software has a number of customizable options, including adjustments for the frequency and intensity of "injury," "stance," "posture," "focus" and even "funniness" (referring to the way laughter is animated). The animatic scope is

3 Toby Shorin, "Report: The Diminishing Marginal Value of Aesthetics," accessed April 10, 2020, / entries/diminishing-marginal-aesthetic-value/.

vast: a zombie can be made to "Right Turn With Briefcase," while a Sporty Granny is asked to "Strafe" and "Samba Dance." The impressive bravura of ready-to-use animatic potential is accessible to any user with a laptop, who can not only scroll through endless character options, but adjust the slider with immediate perceptible effect. Any specificity of these animated subjects is subdued by the minutiae of their parameterization. This "grab-and-go" animation is the product of companies seeing corporeality—rigging, motion, animation—as a client-facing service, disabling any meaningful conversation around medium.

What has come to be specific to the parametric, then, is the notion that corporeality can be crystallized into style.⁴ The already-seenness of an image, which allows radically different motions, effects, and phenomena to feel similar despite being seen for the first time, flips the terms of figure-ground relationships—there is no constant subject. What we have is a continual refashioning of special effects towards uncanniness. It is not the interchangeability of animation that exclusively produces this effect, but an innate quality in the construction of these forms as parameterized characters.

The inability to program everything as though it were a distinct entity—consider bombed cities ripping apart the same way across films—is the consequence of procedural animation techniques that simulate effects, not causes. The simulation of randomness using translated code is often taken as proof of a "real" materiality. But sophisticated software abstracts movement, light patterns, texture, and other accoutrements of live-action cinema, and repackages them into a re-calculable image. How many points of supposed randomness does a simulation need to trick us into realism? And what are the ideological consequences of these forms of imaging, where a clown, a dinosaur, and an alien can all dance the same way, die the same way, and cock a gun the same way, and a user can flick through them at once, seeing the transformation in real time? The computational systems that allow audiovisual meditation for users create a troubling opacity regarding their own generation.

Parameterized subjects' depiction of death provides a protective boundary, a feeling of virtual thickness that makes inaccessible sensations seem regular. Consequently, something like "deathliness" is experienced not merely by the force of a virtual image, but by a distinctly parametrized one. Congress missed the point when they dubbed *Mortal Kombat* hyper-violent: the dismantled bodies, in fact, have an impressive ability to soften realism through their modeling. They also signal the birth of a particular corporeality.⁵

4 By "style" I don't mean to suggest the sense of marking a unique tendency of an artist or mode, but rather its opposite: replicable effects fused into images which operate as distinct entities.

5 But Congress also fears novel corporealities. They may have missed the point about hyperreal violence, but they regularly demonstrate a similar conservatism around realist depictions not predicated on violence, especially where social justice issues are concerned. Consider the lack of opposition to larger-than-life, explosive action movies.

The precedent established by gaming franchises is not towards images of hyper-violence—although I am certain those who demonize violent video games as capable of inducing a “moral panic” would disagree on this point—but towards images that are parametrically real, which produce certain, constraint-based effects and elicit responses from audiences that can read these effects self-referentially. In the case of *Mortal Kombat 11*, imagery pushes the game’s synthetic realism into a space of representation that does not necessarily produce nausea or disgust, but instead verges on comedy or tragedy. Not only do *Mortal Kombat*’s virtual forms reference the internal logic of how they are made, they display bodies that reference something outside themselves. The fatal blows are not about death, they are gestures towards the fantasy of a camera that can zoom into the body, indexing visibility without revealing what is visible.

The new status quo is not one of real-versus-cartoon, but a new visual paradigm entirely: parameterized-real-versus-cartoon. The way these characters come to be constructed in the modeling state—the polygons that compose them, the real-time simulations, and the skeletal rigs that form the underwire of corpses—believes their beginning as metrics, inputs, algorithms, and other coding languages assigned by animators and programmers. The images produced by these technical apparatuses introduce a new level of estrangement where the major referent is no longer the physical world, but the technical culture behind the curtain.

Realism begins to include more than what resembles reality; it has to account for an invisible set of inputs which produce the parameterized picture. The gory cross-sections and floating limbs of *Mortal Kombat* become diagrams of all the software constraints, corporate limitations, and computational expenses that game developers undergo to produce the images, yet they are presented to us as fully formed from the jump.

Evident in these historical shifts—and across contemporary visual cultures which utilize CGI to enliven characters—is the correspondence between the subjective imagination of ourselves and our objective being as the two become increasingly singular. *Mortal Kombat* cutscenes offer a small cross-section of what it means to “embody” virtual forms, and constitute just one example of a much broader phenomenon of digital culture: the infusion of vitality into a set of data that then becomes manipulable. This phenomenon, however, is not exclusive to sites where bodies are operationalized; we also react to computer-generated effects in movies. This response moves us beyond preconceived notions of a passive, second-order viewer experience and into an operational, psychoanalytic, and corporeal exchange.

The relationship between body schema and culture is a two-way street: bodies, images, technologies, and aesthetic modes merge in relation to and co-determine one another. “Embodiment” itself, as terminology, is informed by images; it doesn’t pre-exist culture but emerges from it. Working from this position, present modes of visualization can be signs of things to come—evidence of the ways we are starting to see ourselves more attuned to the expansive possibilities of embodiment and its myriad locations. Is there a shared basis for certain

pervasive imaging strategies within modeling techniques, and if so, how do they influence and describe what the body can contain? What is the effect of this kind of modeling when we witness things in the world? Contemporary forms of modeling make visible the supernatural and invented nature of fabrication, but do not make them any more unreal. Images bear traces of the world, and these forms of comportment both historical and new foster alternative socialities—an impetus in agency and investments of our flesh.