

beneath and above this *cantus firmus* there run disordered exuberances

—Ernst Bloch¹

It was like being pinned to the ground while an angry dishwasher shat in your face for two hours.

—Charlie Brooker on **Transformers 2**

As those who saw it know, Neill Bloomkamp's **Elysium** (2013) was a boring little film, riddled with the same neurosis that structures most recent films of its ilk: it yearns to be exploitation cinema and hail the **Halo** roots of its interchangeable predecessor **District 9**, yet it lacks the guts to admit it. Like a savvy player of those first-person shooter (FPS) origins, it advances by taking cover, slipping amongst weighty issues (health care! citizenship! the Global South!) to get to what it, and we, *actually* came to see: ecstatic haltings of narrative advance (explosions, things breaking, rich people with nice legs, rich people cowering, Matt Damon playing a prole and having petty revelations) and the frisson of generically loaded moments (a blown-off face worthy of the best splatterpunk; a very **Mad Max**-ed-out car; a retrofitting of **Blue Collar** with cut-rate **RoboCop** parts). And contrary to the expected froth of interpretation that tailed it like a **Dark Knight** hangover, the film is wholly uninteresting “politically” or narratively—or even at the point where the two meet in its alleged allegories—for the simple reason that it tells us nothing not already confirmed by the basic state of affairs in the world at large. It just turns South/North into Earth/Space.

However, there is a minor aspect of the film's depicted world of more interest, insofar as it bears on a condition that has been quietly creeping its way to dominance for years now: its treatment of technology. The interest lies not in the abundance of gee-whiz gadgetry but, rather, in how a film that features hackers able to bring down class structure itself *and* bolt a robotic exoskeleton to the bones of a dying man nevertheless still establishes a tremendous, unbridgeable gulf between the production process of those machines

and their near magical functions once built. The film goes to great lengths to point out how the advanced technology of this future is still built on Earth, by hand, and in factory. Cops may be expensive, automated, irradiated, and Ferrari-red drones, but workers remain meatly human, poorly waged, highly replaceable, and still physically making it all.

What the film never displays, however, is any sense that those same workers who assemble the drone cops or those “healing beds” have any knowledge whatsoever of how they function. How do we know this? Because they never sabotage them to turn the drones to their side, to put the muzzle to their absent lips, or to at least make them run with a limp. They never tune the healing beds *to give* the Elysians syphilis.

Above all, they never make their own. The film literalizes its absurd treatment of technology as pinnacle of inhuman mystique by showing “migrants” from Earth trying to make it through the defenses (read: border wall) of Elysium, all in order to sprint over nice lawns, into a mansion, and onto one of the beds. Wouldn't it be easier, it's hard not to ask, to just make a version of the beds on earth? After all, the film implies, the Earth-proles are the ones who make such things. That's the sole reason the Cosmic North keeps them around: to make the materials needed to keep them toiling and the Elysians Pilates toned and polyglot. So why wouldn't the workers copy the design? Steal it from the factory, as the song goes, piece by piece? Or, at the very least, hotwire it to blow in the faces of those who condemn them to live?

To do so would indeed be easier and far more compelling to boot, but instead we're left with two options: on one side, the nostalgia for a lost future—a clunkier, notably material version of mid-'90s (and hence late) cyberpunk ethos, complete with tatted hackers;² on the other, an opposition that stages favela-chic, grimy, multi-ethnic club scenes (*à la* **Matrix Reloaded**), and clunky machines with actual keyboards against all-white McMansions, well-tailored pantsuits, and sinisterly smooth tech, especially taking the literally smooth form of touch screens. The road to the continued hell of class society, the film suggests, is paved with aluminosilicate.



The premise that goes entirely missing is of any possible sabotage. It is a blind spot evident not only in the absent act—no one puts milk fat and sheep shit in the exhaust system of servo-droids—but also by the formal ordering of the film. That ordering is one hardly unique to this film, and it consists of filming and digitally animating all locations and situations as equivalent, despite the narrative’s insistence that they are not just irreconcilable but also that objects which pass between them cannot be traced or altered (i.e. sabotaged). As a result, the only way it marks these opposed social orders is by filming poor bodies huddled closer together, the staging in depth and extremely shallow depth of field resulting in denser patterns of blurry earthiness.³ But barring that minor aspect, this is a mode of looking adequate to a built world of mythical wholeness and neutrality, one that can be “rebooted” with different social content, regardless of the ends for which means were designed.

The basic nature of this worldview can be seen in a single image, where the healing bed actually *twinkles*, like gossamer, fantasia, or a sequined whatever, all the while removing late-stage cancer from a heroic little girl without a scalpel in sight. It dissolves tumors and heals broken bones, but unlike our fragile bodies, it is never itself seen as capable of breaking down or running riot against itself. These are integral objects built in accordance with a plan that cannot be grasped even by those who execute it daily, leaving them to instead tilt at cosmic windmills or flee into the immateriality of code.

That opposition between nostalgia for the hand hewn vs. suspicion for the shiny, miraculous things you cannot tear your eyes from is taken to insupportable extremes in **Oblivion** (2013), Joseph Kosinski’s Tom Cruise vehicle concerning a blighted earth. There, too, the envisioned tech of the future confirms the ordering of its screen space into that same near-moral opposition. Giant, drool-worthy/drool-proof



Untouchable tech, or twinkles (**Elysium**)



tablets/tables (filmed in austere long shot) = evil and sterile, however tempting. Brooklyn salvage cottage, complete with well-worn wood and actual books as last outpost on a blighted Earth (explored in snugly close-up) = good.

The reasons for this collocation of alien hostility with cold, perma-new spaces are clear enough. It's an autophagy of viewing, a needling suspicion of those smooth surfaces that are not just its represented subjects but also the grounds of its and our vision, given that for cinema, like **Oblivion** that relies on digital animation, *all* surface textures are mere after-effects, a modular pattern wrapped over skeletal frames and polygons. So for all its fantasies of "rebooting" (a very hard nuclear reboot in **Oblivion**, a gentler one in **Elysium**'s vision of curing the Global South by changing their designation to "citizen" in a databank), this vision cannot help but confirm and deepen that split. It insists that there is no possible articulation of the critique of capital within its own manifest contradictions, other than sheer suicidal exodus or **Wall-E**-primitivist flight back to terra firma. And neither of those options actually get their hands messy with the systems they dream of fleeing; they leave intact a magical vision of an integral and autonomous technology.

The faceless figuration that **Oblivion** gives this complex is apt, hailing not just a sharp, levitating, and cyclopean thing that resists anthropomorphization but also a cipher for the gap between the virtual and the actual, or, more precisely, between the ideal and intended function of a complex technical apparatus and its actual busted, nonfunctional, or murderous state. After all, the echoes of this crimson-lensed pyramid are thick. Not just Hal from **2001**, itself later hailed in the Sauron's eye of the Motorola Droid phone, but also in a machine that itself models, manipulates, and destroys such digital images: the Xbox 360 in its moments of failure, specifically the "red ring of death" of its status light, indicating an endless half-sleep of being on and yet not functioning.

This phrase is, of course, a reference to the blue screen of death (Windows), with further riffs like the spinning beach ball of death (Mac), the yellow light of death (PS3), and hot on the market, the blue light of death, or BLOD, a problem plaguing the just-released "next gen" PlayStation 4 system. Despite the BLOD signifying a coma of processing, its pulse is nominally soothing, at least to those removed from the apoplexy of its owners, carrying echoes of Apple's "Breathing Status LED Indicator" (that little LED that fades in and out in to the rhythm of adult resting breath, 12–20 breaths per minute).⁴ The BLOD shares this mood with its slow gliding cobalt, but unlike the Mac, it is not sleep. It is life itself in its predicateless form, merely existing, endlessly starting up, getting nowhere, and not working.

As for why these machines are failing to do more than just be: standard failure rate, perhaps; "shipping errors" of the pre-holiday frenzy, as Sony started to claim, perhaps. Yet another explanation floated around. The PS4s were made in China at none other than a Foxconn plant, and the work there involved not just the normal hell of Foxconn but also the "intern labor" of thousands of students from Xi'an Technological University North Institute. They were there "voluntarily," but like so many "volunteer" opportunities, it was a choice at rifle's mouth: if they refused to participate, they lost six course credits, which means they could not graduate. So into Foxconn they went, where they were paid an entry-level wage, worked full time, and then forced to keep working overtime and overnight without extra pay. To be sure, one could imagine tech students gaining "valuable job experience" (Foxconn's words) from a potentially technical task, but not in this case. According to reports, a finance

and accounting major was made to glue together PS4 parts. Others peeled off the PS4's protective plastic, slapped stickers on it, and put cords in the box.

What is the connection with the BLOD? On an IGN internet thread for that university, someone claiming to be a student explained that they had, in fact, been sabotaging the PS4s. The title of their statement says it all: "Since Foxconn are not treating us well, we will not treat the PS4 console well. The PS4 console we assemble can be turned on at best." In the body of the statement, it continues: "Foxconn doesn't treat us as humans. So we don't treat their products as high quality products. At best, the machine will turn on. Ha ha!"⁵

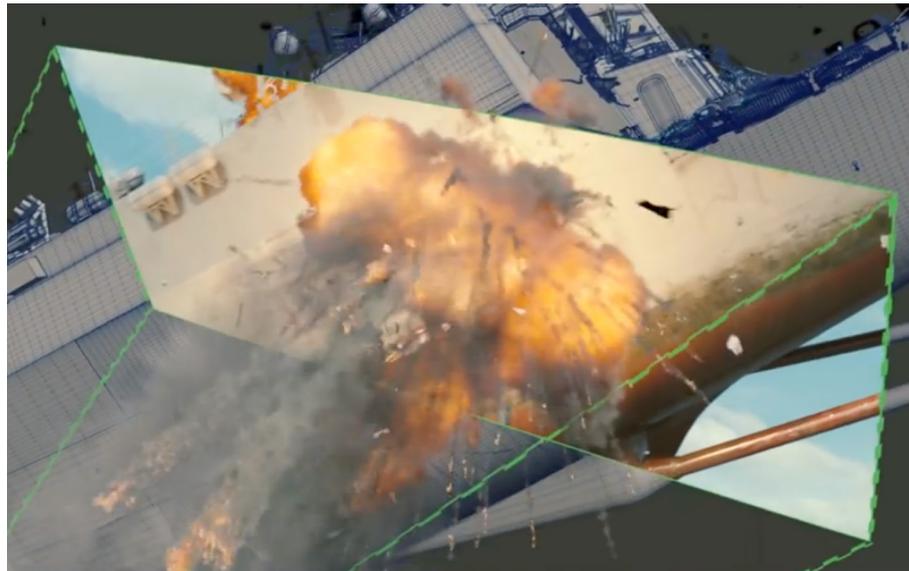
Here, in years increasingly structured between the double dead-end (the magically smooth or the preciously repurposed), visible in those same films destined to be watched on PS4s, sabotage of the variety that emerged in the late 19th and early 20th century (and was immediately demonized) shows itself wholly operable. We double back to sabotage's historical role as the "guerilla fighting" of class conflict because sabotage, or the "knock-out drops" of production (Arturo Giovannitti), practices a refusal that does not flee from the circuits of capital. Instead, it forms a deep bond with the failure, breakdown, frictions, and loopholes encoded in their very arrangement. And the hypothetically unskilled, called in on false pretenses to be worked beyond contract, show themselves able to very quickly learn the minor deviations needed to put a complex thing out of commission in such a way that goes unnoticed until it has traveled halfway across the globe and become a living room's accidental and expensive monument to antagonism.⁶

What is the relation between a sabotaged PS4 that never finishes booting up and the omission of sabotage in a film whose Blu-ray might get played on it, if only it would start? One way into this was hinted before: the representation of a world split between competing regimes—or at least appearances—of technology, between craft and sheen, or the obdurate and the flickering. Indeed, the opposition at work in **Elysium**'s grimy keyboards vs. transparent tablets or in **Oblivion**'s yuppie-driftwood vs. inhuman triangles is hardly limited to those films. In other recent releases, like **Pacific Rim** (2013) and **Battleship** (2012), it adopts the shape of an even more hackneyed contest, digital vs. analog. It should come as a surprise to no one that the latter, configured as relentlessly human, wins the day, given that so much action cinema from the outset has turned on the out-gunned and out-manned beating foreign hordes by simpler means, elbow grease, and a generalized commitment to Freedom.

What is different about this relationship between sabotaged machine and films of the unsabotageable, however, is the stark opposition between this visual-narrative schema and the *means* by which it was produced: namely, by a massive exertion of the digital, with a heft of capital, time, and processing power that dwarfs the towering fighters on display. While **Pacific Rim** integrated certain "practical effects," such as the construction of miniatures for destruction, Gipsy Danger—its central and explicitly analog mechwarrior "Jaeger"—was "built" digitally by Industrial Light and Magic (ILM), as were the other Jaegers and Kaiju (the giant aliens they fight). Skin, lighting, and damage effects are wrapped like panels over gridded forms, which are then tossed into and through similar objects (Kaiju, buildings), themselves consisting of further panels, frames, and quantified volumes. The resulting splinter and splatter move in accordance with calculations that crunch the interaction of phantom weight and velocity and attempt to randomize, within a restricted range, particle effects and debris to produce the appearance of the unpredictable contingencies resulting from real matter on matter action. The same goes for Battle-



Superficial damage (Animation process still from **Battleship**)



ship, whose visual effects were also helmed by ILM and its various “partnerships” with VFX teams and render labs far afield, including in Singapore. Digitally modeled water, ship, sky, and the explosive force of fired shells alike are set within a digital “aquarium” to calculate how they interact and slosh. Like the Jaegers, they are never filmed from any angle: they are set in constructed space and recorded from a chosen perspective after their movements have already been modeled, when they are merged with other elements shot or animated. So even as a green-screened Charlie Hunnam swaggers toward his nuts-and-bolts counterpart, the actual method of these images’ construction guts any validity of the film’s nostalgia. How? The story’s binary of analog and digital is, in terms of the film’s visual and production history, not actually a binary but just one more textural modulation internal to a digital schema, a camoufleur’s cladding applied after the fact. In this way, even the most truly “analog” moments, such as the incorporation of actual destruction effects into the mix, become a mark of digital mastery. They have been not merely incorporated but flattened to a layer of information assembled into a unified space, now ready for post-production rotoscoping that will restore it to the pop-out depth of converted stereoscopic 3D. In trying to make sense of it all, we end only with a headache, the “suppressed, dull rage capable of being distracted,”⁷ and the drifting data of a 3D storm into which thousands of hours have been sunk—only not like battleships whatsoever.

To think about the relation of such images to sabotage therefore requires thinking first about how those images relate to the process of their making. Because in this visual system that process becomes pressingly apparent even as the materials involved remain invisible, obscure, and beyond the grasp of those—myself included—who watch them. We know that the Jaeger is spun forth from a combination of processors, labor, and time just as much as we know that the particular techniques, decisions, patches, and tweaks are beyond our reach. We just know that it costs.

The connection—and distance—from sabotage becomes clearer when we track back from an animated leviathan fight to the machines that play it for us, because there, too, the real links between how the device was made, how it operates, what it is supposed to do for us, and what it *actually* does are deeply obscured. To be sure, they are hidden in the way that any commodity, especially a mass-produced one, covers the explicit tracks of its path from “rare earth” metals to Foxconn to living room to e-waste processing site. Yet these images veil those passages even further. Consider the reigning object used to mark “advanced,” and potentially evil, technology in these films: the

touch screen, be it in **Oblivion**’s table-length tablets or **Battleship**’s tablets or the ubiquitous screens—be it in **Elysium** or **Robot and Frank** (2012, dir. Jake Schreier) of translucent glass on which information can appear and vanish without a trace or the furthest extension of barely-there-ness, the holographic OS of Iron Man that lets Tony Stark play goateed Sherlock in a neon charnal field. Their real-world correlates are hard to miss: tablets and phones in the baleful arms race to be ever thinner, ever lighter, all approaching a fantasy point where one will hold what weighs nothing and has no depth yet can still be touched, swept, and pinched. A screen untethered from both its mass and history of manufacture.

Sabotage, from the outset, stands opposed to the ideal of the smooth and thin, and insists instead not on the literal roughness or thickness of an apparatus, like some awful steampunk tablet, but on its technical and historical roughness, density, and internal contradictions. It insists on this insofar as it requires a deep connection with the machines, commodities, concepts, and spaces that curse us, a collusion with enemy materials against their social forms. After all, you can’t sabotage something unless you know intimately how it *ought* to work and hence where the points of friction between *ought* and *does* lie.

In short, sabotage is the name for the very prospect denied by **Elysium** and its fetish of objects that can be built and used, but neither understood nor altered; they are seen as miraculous, but never as secular. To answer the question posed before: the relation between such cinema and sabotage is a negative one. This cinema is the image of the historical negation of sabotage when sabotage is showing itself increasingly to be a necessary angle onto the contemporary, lived world.

However, this negative image, a portrait of sabotage thwarted and foreclosed, is nothing so immediate as a touch-screen-piloted drone that lacks discernible nuts and bolts to loosen, or an exhaust port to piss in. It is *de facto* a more complicated capture, both a suspicion about the capacity of elements in the world to have properties that are not immediately apparent *and* the elimination of the prospect of doing anything about it other than gawk. Still, it can be glimpsed in the form of one visual situation and repeated again and again in the large-scale cinema of the past decade to the point of becoming an authorless signature. It can be seen in **Constantine** (2005, dir. Francis Lawrence), when The Devil comes to Earth and decides to make a splashy entrance, so to speak, shattering a glass door and strolling through the frozen shards that hang before him.⁸ Or in the forest escape scene



in **Sherlock Holmes: Game of Shadows** (2011, dir. Guy Ritchie), where the advance of time jerks back and forth from the creep of exploded particles across empty space to Jude Law's herky-jerky sprint. Or in perhaps its most "advanced" recent display, in the third Transformers film, **Transformers: Dark of the Moon** (2011, dir. Michael Bay), when a robot worm-python burrows through and then strangles a highly reflective skyscraper, the smooth outside of which various characters slide down before adding to the debris by following this cinema's basic injunction—"Shoot the glass!"

In these and the plentiful other instances familiar to anyone who has seen a capital-intensive action flick in recent years, *the* recurrent obsession, arguably, is to depict the after-effect of one or more shattered surfaces. These are always in slow motion and often decelerated to the point of near arrest, as the manifold shards of whatever busted or falling material fill, hang, and splay in the air, clattering against each other and other elements of the scene joined together as animation. In short, this is the application of bullet time to all that exists.

Indeed, that's precisely what happens in **Dredd** (2012, dir. Pete Travis), which provides a sublimely simple narrative excuse for those "time slices":⁹ a new drug on the market called "Slo-Mo" that slows the user's experience of time to 1% of normal. The film throws its hat in fully with the stoners, dwelling on their Technicolor and, like **Elysium**, literally twinkling experience of not just elaborate bullet ballets and busted windows but also more quotidian elements: the lilted curtains in a van, the water in a bath.

In this way, the film marks a key distance from the earlier use of bullet time in **The Matrix** (1999, dir. Andy Wachowski and Lana Wachowski) and in video games (such as **Max Payne**, which was developing the practice concurrently). In games (primarily FPS and driving) that employ this rotatable and almost static slow down, the motivation is explicitly "practical" and linked to the looking and acting subject. It lets you, the player, aim or steer at "normal speed" while everything around you trudges through molasses.¹⁰ In **The Matrix**, the motivation is not practical in terms of viewer experience, given that you aren't pausing or accelerating the film, but it remains so narratively, such that what feels slow and navigable to Neo (and us) looks like frantic dancing to the enemies he subsequently dispatches. In **Dredd**, though, we have the culmination of cinema's drift from the putative practicality of those "gee whiz" bullet time shots.¹¹ Now, we share the POV and subjective coloring of those for whom the encounter is purely esthetic, those who have the flayed time to contemplate each and every drop of blood or spike of glass but are too dazzled to engage in the events unfolding around them.

As **Dredd's** Slo-Mo suggests, the destruction of the built environment to which this technique is primarily linked is not the point around which shard moments are marshaled. Instead, the shattering is itself the excuse for the desired effect: a chaos of data both too complex to visually process yet supplied with ample time to fail at doing so. So to refer to the material that falls, drifts, or lingers as a set of "surfaces" is not to limit this signature image to moments in which an obviously shard-prone glass door explodes into a perennially blue-lit

A slow decline (**Dredd**)



ice storm by Lucifer. The situation is the same in the kind of particle-effects/atomistic puke that a film like **Sucker Punch** (2011, dir. Zack Snyder) loves, where ash, snow, fire, glass, wood, dirt, sequins, and spent shells jostle for screen space.¹² So, too, with the destruction of things we might not consider first and foremost as surfaces: the entirety of central London, for instance, which is devastated in **G.I. Joe: Retaliation** (2013, dir. John Chu) by means of a tungsten-filled platinum rod dropped from an orbiting satellite.

The prior entry in the series, **G.I. Joe: The Rise of Cobra** (2009, dir. Stephen Sommers), had its own bravura feat of urbicide, letting “nanomites”¹³ loose in Paris. There, the city is surface in the guise of substance, as any and all durable materials—cars, bodies, the Eiffel Tower—are suddenly dissolved as if they had been thin veils of matter from the start, reduced to green mist that disperses in the wind. In **Retaliation**, the opposite is the case: actual substance, heft, and unevenness is rendered a breakable surface prior to the destruction. The metropolis is ruined as just such a cracky, shuddering surface, as if London had somehow been erected directly on a mosaic of pieces and plates that, when put under pressure, break on the dotted lines.

“As if” because that’s precisely how this London was built. As Bill George of ILM, VFX Supervisor for the project explains,

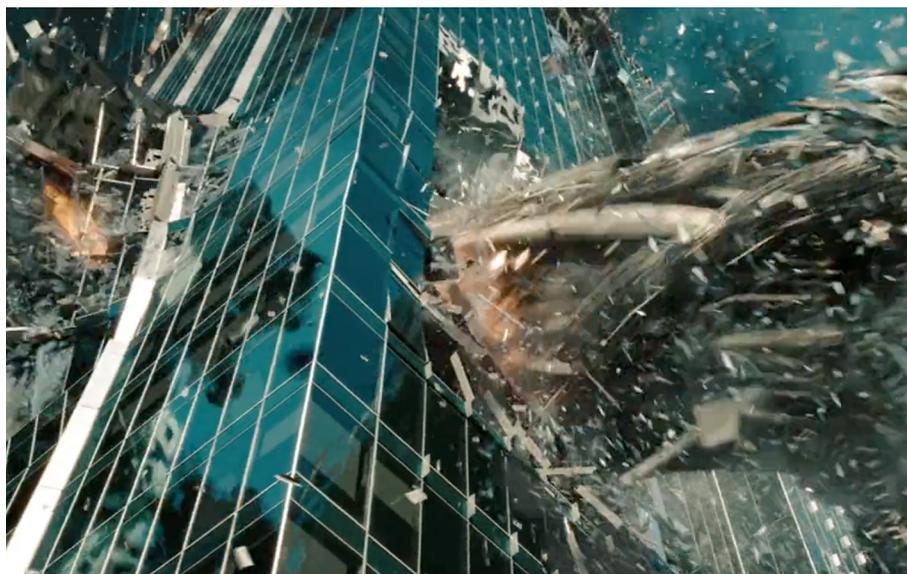
When the filmmakers turned over the shots to us they explained that they didn’t want to see the typical “nuclear blast” type shots. They wanted the surface of the earth to “shatter.” We explored the idea of treating the ground plane as a thick “shell” that would break like glass when the impact happens.¹⁴

The effect is achieved, no doubt. However, the way this “shell” breaks is in accord with the breaks *already* there, because this destructible London was constructed as a montage of “plates.” Having been provided with “helicopter footage over London to use as plates,” these modular slabs dictated both images of London: unruined (the assemblage of various angles and footage into a manageable pattern of surfaces that maintain their properties)¹⁵ and midway through ru-

ination (“this animation of the plates drove ALL the destruction and simulations that would follow”).¹⁶

In this way, action cinema’s broken mirrors, windows, windshields, and atrium roofs are merely the most explicit form of a condition pertaining to *all* elements of its filmed and animated world, entire cities included: the treatment of that world as not just a set of surfaces but a mosaic of screens. The particularity of a screen is not that it presents information but that it can display images or represent a surface indifferent to what lies behind it, producing texture and pattern decoupled from substance. In the case of these shard sequences, the shots themselves are not an integral image first filmed and then secondarily projected or displayed on a flat screen, such as in a cinema or on a monitor. Rather, they treat distinct material properties of objects, whether bark, flesh, steam, metal, or glass, as dependent on a common and neutral surface, a digital “skin.” Wholly separable from the various forms it encloses, that surface is used to wrap, such as the hull of the battleship around its wire-grid skeleton. Each of these wrapped surfaces then itself acts as a screen that displays the chosen texture, be it of a Kaiju’s scales or a skyscraper’s window, before being assembled at various layers of screen depth into a composite whole ever ready to be dissembled back into a set of smaller shards.

Why *shard*? The roots of the word, from a past participle of the Old English verb “to cut,” point toward the particular quality of these omnipresent new surfaces and why a film-after-film obsession with shattering them goes far beyond the action film’s general destructive character. These shards are both fragments of a particular depicted thing and a cut without substance, merely a portion of a surface that can be reassembled with no loss. In this sense, any one of those shards is concurrently a piece of that once-integral but now scattered world *and* never just one piece—in their conveniently drift outward, we are endlessly reminded how they *could* be fit back together. That “and” of the mutually incompatible is the hallmark of this shard cinema. It opens up the prospect of a forensics in which the unbroken could be reverse engineered from the wreckage and a total obliteration of that chance.



Shard City (**Transformers: Dark Side of the Moon**)



How exactly do they slam the door on that possible forensics? A comparison with video games is again useful. In games with “de-structible environments” and hence significant portions of play time spent staring through clouds of drifting debris, the challenge, at its most abstract, is not to survive, kill, or loot. It is to distinguish between practical phenomena (four pixels that signify an alien’s head, i.e. something to be killed) and aesthetic phenomena (four pixels that signify a bit of chaff, i.e. something not to waste ammo on). In action films, this impulse is entirely off the table. Even if we get in the slaughter groove and begin looking for things that might maim the hero, the film is structurally indifferent to that looking. We have no ammo to waste. This fact seems not entirely lost on shard cinema itself, at least insofar as the highest grossing-examples of it are concerned: **The Avengers** (dir. Joss Whedon), 2012’s top grosser, and the **Iron Man** series. That distinction between practical and aesthetic is not just operative in these films. It is crystallized into a single figure, Iron Man himself. Consider, for instance, the final battle of **The Avengers**, which is set in New York City and racks up a digital-damage estimate of \$160 billion were it to “really happen.” The battle is an endless chain of collisions, quips, and tracking shots through an animated zone where something is always breaking, falling, or flitting around in accord with its own private algorithms. Yet in the battle sequences, especially in that climactic one, the capacity for Iron Man to save the day is not limited to his ability to fly faster, reach tall things, or carry a nuclear weapon through a portal. It depends instead on his capacity, aided by a “heads-up display” that highlights relevant dangers, to look at this total shitscape of a collapsing city and decide what actually matters and what doesn’t. What is an about-to-die love interest and what is just *stuff*. No wonder that the other salient aspect of those films is his showy holographic OS that makes screens appear “out of thin air”: he is less hero than designer and navigator, the one who mastered the difference between phenomena that can wound, that can be scrolled, and that can be ignored. Iron Man, conqueror of aesthetic experience.

I, like most viewers, have a harder time managing this feat, and the films seem to recognize this, insofar as their favorite shot pattern is a one-two of 1) *chaotic storm of unprocessable visual data* and 2) *close up on gape-mouthed character staring at said storm, aping the wheezing cognitive motors of those watching*. It represents an archly moronic variety of the sublime, one in which there is no illumination of perceptual faculties, just an epic mess of whirl and clatter that voids them like bowels and, in lieu of experience, a portrait of a character undergoing what we ought to. Brooker’s quip in the epigraph about the peeved dishwasher is spot on. **Transformers**’s vision of a vengeful Mustang-robot can’t compare to the visual wrath of massively over-powered processors given a full two hours to spill their guts.

Brooker’s comment also points to the other key quality of all this—its relation to time. Shard cinema operates on three distinct timescales, even if it can only acknowledge the first two. The first, and most obvious, is of sheer duration, well familiar to those checking their eyes for blood seep at the end of **Avatar**. Second is the temporality of the shard moments themselves, given that almost all use varieties of extreme slowdown that open up the prospect of examining every piece, every glimmer, even if there proves, each and every time, to be too many to even count.¹⁷

The final timescale of the shard is one that, properly speaking, we cannot see, at least in the way that we can see a film for two hours or see the slowing of action. Odd, perhaps, given that this invisible time is, quite literally, the very thing we stare at: the tremendous quantity of hours piled up in the form of digital building, animation, rotoscoping, conversion, rendering, and all the other tasks, tweaks, and processes that go into not just the models of a sequence but every single frame. Commenting on the robot-python meets skyscraper scene mentioned before, the head of visual effects for the film gushed, “The render times for Colossus entwined with the Tilted Building were the highest in ILM’s history: 288 hours per frame! And that is just for one eye, and sometimes the computer would choke on a frame and we had to start over.”¹⁸

Doing the math is as simultaneously ugly and dazzling as the scene itself: 288 hours per frame, 30 frames per second, 2 eyes per second, equals: 17,280 hours of processors struggling to make it all hang together, not to mention the time of human tweaks, oversight, and fixes, are written into *every single second we watch*. It seems no

stretch to say that shard cinema is one of the most blindingly dense encounters with time in the history of the species, even if we can hardly grapple with it in the theater or after.¹⁹ A rich image of the highest order, it alone is a cinema that cannot be replicated for cheap, cannot be haze-filtered into indie-film competition with the majors. Hypothetically, such a combination of time modes—the near halted and the thick—might open up a different type of looking, one not just to what shard went where but to where these came from. Because like capital itself, this image of capital writ mammoth requires global circulation and wage differentials to continue being made, here in the form of “render labs” in Mumbai, Singapore, and anywhere else where the mind-numbing labor of shard sequences to 3D are done by hand, vector by vector, frame by frame.²⁰ Fitting: the destruction of the accumulated capital of the global north will be achieved by the long labor of the global south. Contemporary action film, like history, recites Fanon under its breath.

To create that enormous embedding of time, with its buried traces of global circulation and exploitation, in every single second is to manifest on the most basic and aggressive of levels the historical refusal of sabotage. It spits in the face of a material critique that might begin by knowing the deep histories and idiosyncrasies of what surrounds us. That is its simple equation: for every splinter of glass—in which we can see the reflection of another that can display the signature of a technique used in a specific render lab in a particular city far from either the one where decisions are made or the one devastated in the film—there is this leviathan wealth of time. Data’s lyrical moment, shard cinema hoards time. It pulls it out of circulation and holds it out like bullion to say nothing other than *See? See?* When we do oblige, as we do, we see exactly what we cannot help but see anyway: capital and time and Shia LaBeouf stumbling through a pixel blizzard, simply agog at all that exists.



1

This essay is for V, who has sat for many hours with me beneath these angry dishwashers. Elements of this essay appeared as initial sketches in two posts on my blog, **Socialism and/or Barbarism**: <http://thenewinquiry.com/blogs/s-a-o-b/able-to-be-turned-on-and-that-is-it/> and <http://thenewinquiry.com/blogs/s-a-o-b/shard-cinema-1/>

2

Yet for all its muttering about healthcare and, hence, attention to the fragile flesh, it is here so far from a Tetsuo **Iron Man** lineage—and the maggots swarming around its iron femur—that the very possibility of infection is absent, despite a whole lot of metal being drilled into one human body allegedly just days from death.

3

That close huddled and dense frame it itself not just part of its style but merely an extrapolation of the animated world it films, hardwired into the spacious architecture of Elysium vs. crumbling slums of the Earth.)

4

It does so because they determined it to be “psychologically appealing,” and, I suspect, to naturalize the act of waking to find that you have been spooning an Air.

5

<http://www.ign.com/boards/threads/foxconn-intern-student-in-yantai-china-claimed-to-make-bad-ps4-consoles-three-months-ago.453522435/>

6

Such affinity does not remain technical. It also becomes a blurry doubling of product and producer, to become as nonfunctional as the commodity and vice versa. Both the PS4 (technically on but in a BLOD coma) and the interns (technically skilled but just there to put things in boxes) are reduced to being technically alive but without properties. In other words, becoming what is for capital the basic proletarian condition: technically able to labor, whether or not one turns out to be productive. So if, in the long history of sabotage, the central slogan was “for bad wages, bad work,” the Foxconn action articulates a version all too fitting for the continually hemorrhaging bond between meat and time, bodies and capital: “for a degree zero of work, a degree zero of life. Able to be turned on and that’s it.”

7

Ernst Bloch, **The Heritage of Our Times**, p. 108.

8

What these stills suggest but don’t fully clarify is the three distinct velocities at work in this sequence: the outward explosion of the glass, which is brought to a near-standstill; the forward movement of Lucifer, who strides through the glass as if it was hanging ornaments; and the molasses velocity of the sequence as a whole, which reduces even Lucifer’s strut to a Zeno’s crawl. Part and parcel of techniques related to “time slices” and “bullet time,” this plural velocity is as endemic to these films as the treatment of such surfaces.

9

Composed of either high-frame-rate photography (4,000 fps in **Dredd**) or rapidly sequenced individual digital cameras, much like Muybridge’s studies. These are often combined with, or constructed into, a smooth tracking shot, the result being the kind of motion made famous by **The Matrix**, where the camera rotates around a three-dimensional form that is *almost* static but not quite.

10

From **Max Payne**’s game manual: “When pressed into a tight spot, Max can activate Bullet Time, which will slow the action around him, while allowing him to aim his weapons in real-time.”

11

The use of a pseudo-bullet time in **GTA V** echoes the esthetic predominance in **Dredd**. In **GTA V**, two of the characters’ “special skills” allow them to slow down time, one while driving, the other while out of the car (with the intended use of a firefight). However, when the driving special skill is activated and combined with the game’s “cinematic camera,” it allows for something of a user-controlled bullet time that slips quickly toward the impractical yet oddly pretty, as the angle is adjusted not just to squeeze between two oncoming buses but simply to look at the fine-grained world while trying to steer from a now very skewed angle.

12

Nor is it to insist upon which elements are digital visual effects as opposed to not: the lobby scene in **the Matrix**, for instance, was filmed with real chunks of matter spritzing around Keanu’s head but the relation of production to sight I am identifying holds as an overall condition regardless.

13

One of the best cinematic villains in the last couple years, along with the tire in **Rubber** and Matthew McConaughey in **Killer Joe**.

14

<http://www.artofvfx.com/?p=4082>

15

And, we should note, in accordance with a hierarchy of “foreground and background assets with the foreground models being more finely detailed and the many background ones being more procedural.”

16

ibid.

17

However, these shots involve a further split that, for all its untethering from narrative progress, insists that space and time remain entirely unified. How? Recall that the camera moves, twists, and orbits fast enough to capture what is falling as if it is just hanging in the air. Which is to say that nothing is slowed, nothing is halted. Instead, we just adopt the time of a camera that moves impossibly fast, faster than speeding bullets or the particulate matter they kick up in a fuss.

18

<http://www.artofvfx.com/?p=1444>

19

The embedding of time in digital animation also raises the possibility of equally tremendous losses of time, such as the accidental near-deletion of **Toy Story 2** late in production. See: <http://thenextweb.com/media/2012/05/21/how-pixars-toy-story-2-was-deleted-twice-once-by-technology-and-again-for-its-own-good/#1r2CQq>

20

Thanks to Lucy Raven, whose work called my attention to the particular circuits of render labs, especially for conversion. I recommend in advance a project of hers in the works that will expand on her research into this.

