

Ang Lee

BY BLAKE WILLIAMS

Fourteen years ago, two members of the US Army Research Laboratory in Aberdeen Proving Ground, Maryland, released a comprehensive study on the effects of low-fidelity video on human psychomotor performance, behaviour, and subjective perception. As robotic technologies become increasingly common in the fields of space exploration, search and rescue missions, national defense, health care, and, of course, the entertainment industry, the lab's investigation set out to determine—on behalf of the American military's so-called Future Combat System—the deficiency threshold for live video feeds to be streamed in from the battlefield, where unmanned assets, vehicles, and systems are to be operated by soldiers controlling them remotely, out of harm's way. However, potential obstacles such as bandwidth volatility, electronic jamming, and dynamic network distances pose challenges to streaming video and therefore also to the success of whatever missions are being carried out. A balance needed to be struck between the feed's colour saturation, image resolution, and frame rate so that combat events could be presented faithfully enough for the operators to achieve the desired results. Significantly, it was the bottom threshold for frame rates—the temporal variable—that most threatened to compromise the operators' performance, and thus warranted the closest inspection.

Superficially, Taiwanese filmmaker Ang Lee's own recent experimentation with video frame rate—and I do think it's apt to call his two 120fps 3D films, *Billy Lynn's Long Halftime Walk* (2016) and *Gemini Man* (2019), experiments—takes place in the low-stakes, relatively diverting domain of the entertainment industry. He follows along a path laid by Peter Jackson and, well before him, Douglas Trumbull, marching toward what they continue to collectively contend is the future of immersive cinematic storytelling. But where Jackson used frame-rate advancements to reduce cinema to theatre, and Trumbull—who once described his patented 60fps 70mm Showscan system as “3D without the glasses”—insists that a movie's artistic success is somehow correlated to its resemblance to a live event, Lee has so far applied the technology with an understood interest in its historical, theoretical, and political implications (even as his efforts to explore the format continue to be handicapped by ostensibly audience-friendly plot lines and star attachments). Lee told the audience at an advance screening of *Gemini Man* in Toronto last October that he'd love to

use high frame rate (HFR) to make a non-narrative experimental film, and I don't have many reasons to doubt him on that.

Since first adopting “emergent media” to make what may end up being his career's final critical success—*Life of Pi* (2012), which evoked the enhanced realism of 3D in order to argue for the cruelty and ugliness of reality—Lee has spent 178 million dollars making two movies that are deeply critical of corporate spectacle. Both filmed in HFR 3D, *Billy Lynn* and *Gemini Man* manufacture an abject reality born from excess (of money, of frames), and embody a resentment for the systems that, at least in part, allow them to exist. *Billy Lynn*'s Joe Alwyn and *Gemini Man*'s Henry Brogan (Will Smith) are both emotionally destabilized by images of themselves, and it's perhaps not coincidental that these images are revealed to have been made as a way of forwarding America's imperialist agenda. Here, as in Aberdeen's frame-rate studies for the Future Combat System, the fidelity of the moving image (its motion, in particular) reaches beyond the field of entertainment, and the strength of the image becomes a matter of security.

Yet there is another side. Critical and reflexive, Lee's HFR image places cinema's essential technical procedure—photographic frames flowing, one still image after another, across the eyes—back to the forefront of film-watching. Following a nearly century-long tenure at 24fps, the cinematic frame-rate is in flux again, its dynamism and escalation aspiring to annihilate even the briefest of intervals between images. But, as is so often true of our desires for technological advancement, Lee's step toward a frameless cinema—one that would be devoid of syntax, structure, and the ability to be divided at all—evokes, whether he intended it or not, a desire for the medium in its most primitive state: the camera obscura, the only truly *moving* image we've ever known, and one that is known to fall into some of the same uncanny valleys as Lee's films have lately. Movement, though, misses the point. My own decade of moving-image production began (*A Cold Compress* [2010]) in many ways just as it ended (*2008* [2019]): forging collaborations between incompatible frame rates and light rhythms, which, in their ebb and flow, end up revealing more together than they ever could on their own. The images in these two pieces are about as far away from those in Lee's recent work as they could be—incoherent, broken, breaking, and static. But again, movement isn't the point. The value is a matter of difference.