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Strange Days: Superconducting Quantum Interference as Art

> "Memories were meant to fade […]. They're designed that way for a reason."
> —Lornette 'Mace' Mason (Angela Bassett), *Strange Days*

The rapid progression of technology is nearing a stage at which the past's science-fiction conceptualization of media will soon become the present's standard design process for simply the newest mass market and consumer product. Kathryn Bigelow's 1995 cyberpunk thriller, *Strange Days*, presents an existing technology in a new, futuristic way. Superconducting Quantum Interference Devices, or SQUIDs, have been used since their invention in the 1960s to measure magnetic fields primarily in biological studies, like those of neural activity, due to their extreme sensitivity. They go from being an advanced magnetometer in the real world to an experiential recorder in *Strange Days*. In the film, placed atop a wearer's head, they allow one to record their experiences and all the physical sensations of it, directly from their cerebral cortex onto a disc for playback. SQUIDs have no such ability outside of Bigelow's movie. Although, current trends of technological development place the likelihood of them gaining it, or a newly invented technology possessing it, closer to reality than to fantasy. The latest virtual reality, or VR, headsets or augmented reality glasses may well be one or two innovations away from achieving *Strange Days* SQUID output. This eventuality will have radical effects on the very idea of expression, and its imminence forces a prompt analysis. The discussion began almost three decades ago, when it was nothing more than a seemingly far-off novelty dreamt up by Hollywood. Their concerns resided mainly in the societal implications of the technology, with SQUIDs being a major instrument to create the film's setting of a dystopian and cyberpunk 1999 Los Angeles. The sphere of art shadowing

SQUIDs was left largely untouched. Until *More Strange Days* is released to possibly change that, exploration of this realm is to be done extramurally. By combining information from *Strange Days* with established theoretical discourse around topics of art, such as those from Clement Greenberg in "Modernist Painting" and André Bazin in "The Evolution of the Language of Cinema," there is no need to wait for a sequel which may or may not ever come. Applying these critics' ideas to SQUIDs is only a single approach, but an extremely compelling one. My assertion is that SQUIDs strictly and intolerably represent reality more than they do art. Art should be an expression of reality, not so much reality itself. It is aesthetics and expressiveness of art that separate it from reality, and it is aesthetics and expressiveness that SQUIDs do not possess. Greenberg's beliefs on modernist art deal with SQUIDs' aesthetics, Bazin's on cinema with SQUIDs' expression. Ultimately, superconducting quantum interference has limited artistic potential.

The foremost order of business is to adhere the abbreviation "SQUID" to the connotational structure of the words for each of the many different art forms. Rather than separate SQUID into SQUIDs, SQUID recording, SQUID playback, etc. except where absolutely necessary, I will instead simplify by using only "SQUID." Just as the term "painting" is used to refer to a painted picture as well as a form of art, "SQUID" can be used to refer to any of its variations as well as what must be classified as a form of art. Disregarding that "SQUID" is an acronym ending with "device" (which is the cause of my grammatical desire to delineate its usage per context) gives it a sense of belonging with the other art forms, and, in order to critique SQUID as an art form, it must first become one. This also makes it easier to write and read about. The last clarification to make is that, from here on out, "SQUID" will exclusively reference the technology as it exists in *Strange Days*, not in real life.

For the assessment of SQUID, I will conjecture based on the dictionary definition of art: "the expression or application of human creative skill and imagination" (art, n.1.). Its fulfillment of this definition will determine its artistic potential. Already I have conceded it has some, but it is so minimal that it was done only for comprehensibility. Artistic potential will be broken down into two sides of the

same medium, one side being the potential for it to impart an “expression or application,” the other for it to reflect “creative skill and imagination.” Understand both these sides are grounded in the fact that any artist is “human” and has nothing to express or apply creatively and imaginatively other than their perception of reality.

Now to outline the parameters under which SQUID operates. The movie provides these contingent upon some assumptions. The general function is clear: SQUID records all sensorial elements of an experience, including visual, audible, tactile, and presumably olfactory and gustatory if they are involved. This recording is digitally stored on a disc and able to be played back for anyone wanting to live out what has been captured, no differently than it was originally. The SQUID acts directly onto the wearer’s brain and transfers the stimulations exactly as they were received by the initial recorder. They are consumed as you would expect, the appeal is to be able to experience things one cannot or should not. For some, these are pleasant, long-gone memories of an ex-lover. For others, these are robbery, sex, or murder. The contents and employment of SQUID do provide some insight into its artistic potential, but they are not nearly as significant as its inherent characteristics as a medium. There are two trademarks of SQUID: It has no external projectors, such as screens or headphones, which relay information to sensory organs other than the brain, and, as aforementioned, it communicates all physical sensation.

These come into play in Clement Greenberg’s “medium specificity.” Greenberg, outspoken in his opinions on Modernism, had a series of revelations pertaining to the intrinsic attributes of mediums and how these stylistically relate to the movements to which they belong. One of these revelations was “medium specificity,” defined as the features that are “unique in the nature of its medium.” Their manipulation is “the unique and proper area of competence” for a medium as an art (Greenberg 86). For painting, according to Greenberg, these features are flatness and abstraction, meaning their accentuation in a piece would exemplify a victory for the medium (Greenberg 87). In contrast, SQUID’s medium specificity also happens to be specific of human experience of reality. Therefore, SQUID is as artistic as reality is. Reality is not an artistic medium per se, rather, it harbors art, and being able to view, say, a

painting, through SQUID is about as artistic as it is capable. Greenberg states, “The essential norms or conventions of painting are at the same time the limited conditions with which a picture must comply in order to be experienced as a picture” (Greenberg 89). SQUID’s “norms or conventions” only work to solidify it as reality, because experiencing SQUID is experiencing reality. He goes on to say the justification for this “lies in scientific consistency,” that the scientific method dictates “a situation be resolved in exactly the same terms as that in which it is presented.” SQUID mediates its content in exactly the same terms as that in which it is presented: someone records their experience with SQUID, and then someone receives that precise, objective experience by playing it back. There is no intermediary from artist to consumer like there is for painting: the painter’s subjective conception of reality goes to the physical painting, the expression, which then goes to the consumer. The downfall for SQUID rests in its inexorable fact, its synonymy with reality, its consistency with science. A consistency Greenberg says “promises nothing in the way of aesthetic quality,” and while this may succeed to protect painting, it certainly does not for SQUID (Greenberg 91). Its content is short a material body for not only itself, but also for any aesthetics, any “creative skill or imagination,” let alone the ability to appeal to a consumer through those aesthetics. Arguably the most artistic use of SQUID in *Strange Days* is for pornography, but even in this case, the voyeuristic, sexual, and biological appeal to a user suggests science rather than art or expression. A material deficiency is uncoincidentally not shared by any other art form, and if only one thing Greenberg has ever said is true, it is that “Nothing could be further from the authentic art of our time than the idea of a rupture of continuity. Art *is*—among other things—continuity, and unthinkable without it” (Greenberg 93).

Realistically, all that is necessary to dismantle any notion of “creative skill or imagination” within SQUID is to realize imagination is the opposite of reality. Regardless, this does not necessarily show SQUID fails to satisfy the other conditions of “expression and application.” Unfortunately, other methods do. In *Strange Days*, SQUID is immediate with film. The depiction of SQUID is accomplished through first-person, continuous shots from the perspective of the person who recorded the event. The viewer

understands they are watching a SQUID playback in these sequences because of transitions, characters' physical responses, and explicit showing of the devices. The absence of these techniques would produce nothing more than a deeply focused long take. SQUID is even described in the movie as being "pure and uncut." To decipher what this means for the "expression and application" of SQUID, André Bazin's "The Evolution of the Language of Cinema" can be turned to. Bazin defines montage, the cutting together of shots, as "the creation of a sense or meaning, not objectively contained in the images themselves […]" (Bazin 25). He rejects montage as being "the essence of cinema" and instead opts for the long take and deep focus because they are truer to their photographic roots and thus reality. He dislikes that montage imposes meaning and prefers cinema to allow the viewer to derive their own meaning from the medium, something moving through reality promises (Bazin 46). Once again, SQUID's proximity to reality weakens its artistic potential. "Expression and application" hinges on the ability to embed some kind of meaning, conjured in the human mind, independent from concrete reality, in a medium. SQUID's "long take" and "deep focus" in not just a visual sense as it is with film, but a complete sensorial one, prevents it from being an artistically meaningful expression or application of anything. To rely solely on meaning that can be extracted from reality, as SQUID is required, is to excise from the medium the opportunity for it to be anything more than shallow and superficial.

Greenberg's and Bazin's ideas are admittedly dated, and painting may not be similar enough to SQUID to warrant a convincing connection. However, the conclusions they reach can be found applied to a much more contemporary medium, VR, and more recently to cinema in Lev Manovich's *The Language of New Media*. Manovich proffers what he calls a "fake reality," a space which illudes to reality. For example, in the 1970s, the Soviets hiding the "monochrome, rusty, half-broken, amorphous" country from foreign guests by showing them select, freshly renovated buildings and streets. Any medium can constitute a "fake reality" though, and cinema and VR are of particular interest to Manovich (Manovich 146). He resonates Bazin's claims of montage imposing meaning, saying "Editing, or montage, is the key twentieth-century technology for creating fake realities" and "It is also utilized to change the meaning of

individual shots […] or, more precisely, to construct a meaning from separate pieces of profilmic reality." His next sentence, "[T]he use of temporal montage extends beyond the construction of an artistic fiction," is additional emphasis on the artistic function of an insertion of meaning into a work, an impossibility for SQUID (Manovich 148-149). When it comes to VR, Manovich identifies it as a "fake reality" and its vital quality to be the permission it grants to the subject "to actively change this [simulated] world" (Manovich 166). This quality is also something that distinguishes it from SQUID. The "change" that VR offers is the freedom to visually and audibly, to artistically, based on "creative skill and imagination," alter the space of the simulated world from reality. But this offer does not suffice to ensure an artistic medium, as Manovich believes, "[T]he majority of navigable virtual spaces mimic existing reality without proposing any coherent aesthetic program" (Manovich 264). SQUID, lacking an offer of "change," a materiality that could be artistically altered, and more accurately being titled a "real reality," guarantees even less "aesthetic program" than VR, which guarantees none. Manovich having to pose the question, "What artistic and theoretical traditions can the designers of navigable spaces draw upon to make them more interesting?" is an inquisitive attack on VR, but on unnavigable and undesignable SQUID, a fatal blow.

SQUID's conformance with genuine reality, acquired through its exteroception and lack of materiality, disintegrates the artistic fundaments of human expression and skill, which normally make for the unique, subjective, judgment-based experience of a medium which would authenticate it as an art. For as long as SQUID remains in the world of science fiction, this conclusion is entirely educated speculation; I fully accept that perhaps SQUID's inevitable actuality will refute it.

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