La beauté tragique: Mapping the Militarization of Spatial Cultural Consciousness

Joseph Nechvatal

hy investigate the militarization of cultural spatial consciousness in lieu of the Yugoslavian crisis [1]? To me now, all cultural work appears significant by its comparison to this, and all, bloody bombing interventions. It especially appears significant when the consciousness of the underlying process of militarization is encoded subtly in the manifestation of the cultural practice. In this sense, art today can follow an ancient African example, which persists today. In Benin, Nigeria, chiefs still wear red cloth as part of their ceremonial court dress, and red (by its association with anger, blood, war and fire) is regarded as pseudo-threatening. By the wearing of such an artistically ominous cloth, a chief protects himself (his consciousness) from evil; that is to say from witchcraft and from the magical forces employed by enemies. In like manner, our art—by displaying subtle encasements of certain aspects of warring consciousness-might protect us from the evil consciousness of (and for) war.

I convincingly encountered such reflection (and art practice) in my role as artist coordinator for "Consciousness Reframed 1997": the first international conference to look at new developments in art, technology and consciousness (held at Roy Ascott's Centre for Advanced Inquiry in the Interactive Arts in Wales). There I observed (and participated in) a new sensibility emerging respecting the integration of certain aspects of art, politics, science, technology and consciousness [2]. The following brief words are an attempt to outline what I took to be the core of this phenomenon in terms of politics/war by stating what I take to be the underlying causes that I observed advancing this developing sensibility.

In my interactions with them, I discovered that the art/science/politics/consciousness creators pursuing Ascott's lead are actively exploring the frontiers of science/technology research so as to become culturally aware of the biases of consciousness today in order to amend those biases. They begin with the realization that every (new) technology disrupts the previous rhythms of consciousness. Then, generally speaking, they pursue their work in contradiction to the dominant clichés of our time. In this sense, their art research begins where the hard science/politics/technology ends.

This moderately negative sensitivity toward hard science, politics and technology can be understood best, however, as a trellis on which vine-like connections grow between technology and psychology. Digitization is a key metaphor for the creative minds I discuss only in the sense that it is the fundamental translating system today. Digital inventiveness, like consciousness, is made up of electronic signals—thus digitalia is no longer content with the regurgitation of a standardized, analog repertoire of image-tropes. Hence, the fertile attrac-

tion toward the abstractions of advanced scientific discovery, now stripped of their fundamentally reductive logical methodology.

Most certainly the art/science/politics/consciousness creators that I have met understand that in every era the attempt must be made anew to wrest tradition away from a conformism that is about to overpower it. Therefore, the role of the science/politics/technology/consciousness artist

in the face of war is that of the explorer/researcher. The function of such an explorationally inclined artist, however, is not to find—but to participate in and foster a constant instability of consciousness so as to mitigate against self-stabilizing formations. This encourages internal rhizomatic connections to sprout and expand.

This approach clearly is opposed to the tabular thought nestled behind nationalistic, racial and gender biases that typify the consciousness in back of the warring impulse.

For such art/science/politics/consciousness creators, electronically augmented consciousness is characteristically a form of encounter that precipitates internal shifts in which the grammar of art can collide with and interfere with the adjacent discourses of science/politics and technology. This integration goes far toward exemplifying an aesthetic that has a problematic relationship to material science/politics-based reality.

Though exemplified by the sensibility outlined above, these feelings and strategies of production have been at work for certain significant artists, in my opinion, throughout the bloody twentieth century. For example, one might ask—as I did myself in my research [3] on the central characteristic of virtual reality (immersion)—just why was traditionally framed pictorial art progressively challenged and to a certain extent eclipsed by an ambient-immersive impetus following the Second World War? Evidently there was something endemic within the barbarous conditions of twentieth-century modern warfare that facilitated this development at its onset, rather than any more laudable human aspirations toward the expanding of aesthetic perceptual consciousness. We can find examples of the construction of immersive cultural space previous to the war on occasion, but after it I began identifying a large increase in apparent immersive cultural intentions. In-

ABSTRACT

The author investigates the militarization of immersive cultural consciousness, as initiated by the aerial bombardment of civilians at Guernica and during World War II. Parallel to this trend he observes an ambient-immersive impetus in post-war art, which he traces in the example of the Espace group, and in the currently developing technology of virtual reality.

Joseph Nechvatal (artist, educator), 114, rue de Vaugirard, 75006 Paris, France. E-mail: <ecsatyricon@hotmail.com>.

deed I have deduced that something in the spatial consciousness of society was altered following the war. I have further deduced that the bombing of civilian centers in the course of the war (i.e. Cologne, London, Tokyo)—culminating with the American atomic bombings of the civilian Japanese cities Hiroshima, on 6 August 1945 (circa 140,000 victims), and Nagasaki, on 9 August 1945 (circa 70,000 victims)—changed the world's sense of cultural space radically.

However, Paul Virilio, in his esteemed Bunker Archeology [4], indirectly suggested the initial date of this spatial consciousness transition as being 1943, with the Nazis' preparations for launching the V-2 ballistic missile. Although experiments were undertaken before World War II on crude prototypes of the cruise and ballistic missiles, these weapons are generally considered to have their true origins in the V-1 and V-2 missiles launched by Germany in 1944 and 1945. The designs of both these Vergeltungswaffen (vengeance weapons) confronted the problems of propulsion and guidance that have continued ever since to shape cruise and ballistic missile development. Indeed strategic missiles represent a logical step in the attempt to attack enemy forces at a distance. As such, they can be seen as extensions of either artillery (in the case of ballistic missiles) or manned aircraft (in the case of cruise missiles).

In 1944 at the Peenemünde base on the island of Usedom in the Baltic, Wernher von Braun and his team created the V-2. The V-2 was 14.1 m long (47 ft), and its payload was about 900 kg of high explosives. Its horizontal range was about 350 km (220 miles), and its peak altitude usually was about 100 kilometers (62 miles). It was first fired against Paris on 6 September 1944. Two days later the first of more than 1,300 V-2s was fired against Great Britain (the last on 27 March 1945). Belgium was bombarded almost as heavily with them. Reaching a height of more than 160 km (100 miles), the V-2 marked the beginning of the space age. After the war, both the United States and the Soviet Union captured large numbers of V-2s and used them in research that led to the development of their missile programs.

Nevertheless, Pablo Picasso's monumental 1937 painting *Guernica* presented to art consciousness an earlier (the first) air bombardment of innocent civilians at home in their city of Guernica y Luno during the Spanish Civil War (1936–1939). Here Hitler's Junker 52 and Heinkel 51 warplanes, at

the behest of Francisco Franco Bahamonde, killed 1,654 Basques and wounded 889, including the elderly, women and children.

Previously there had for centuries existed a fairly dependable separation between military and habitational space, but with the bombing of Guernica y Luno the swathed immersive space of the tellurian domain was suddenly made to seem defunct as previous earthly and architectural barriers became porous to airborne invasions. This sense of airborne vulnerability soon extended further and further outward with the launching of spy and then military-communications satellites (Sputnik in 1957), the first manned space flight by the Soviet military pilot Yuri Gagarin on 12 April 1961, and then the first manned trip to the moon of the U.S. Apollo mission in 1969, which featured Neil Armstrong's televised trek on the moon.

Rocket technology enabled military forces to put nuclear weapons on intercontinental missiles, due largely to the former work of Russian rocket pioneer Konstantin Tsiolkovsky (whose visionary ideas came from Nikolai Fedorovich Fedorov), the American Robert H. Goddard and the German Hermann Oberth. With rocket technology, the space of military interaction clearly expanded and, mirror-like, entered the inner dimensions of the human psyche. Virilio verifies this shift in consciousness in his book War and Cinema: The Logistics of Perception [5], in which he traces the colonization of the unhurried gaze by military technologies and the introduction of military intelligence into the indoctrination of the non-combatant's perceptions. This "rational" scopic extension of vision is accomplished precisely at the loss of another sort of vision—habitational ambient/holonogic scopic vision: the artistic visual mode, which is essential to the continuous but coherent quality of immersive art.

This ambient/holonogic immersive perception/cognition/interpretation indirectly refers back to the atmospheric perceptual process called spatial summation, which we use in apprehending enlarged receptive fields. And in terms of this summative sense influencing an immersive cognitive visuality, it is reasonable to make use of the holonogic schematic model of Arthur Koestler—in which no set or frame of perceptions may be viewed in isolation or as a single part of a finite perceptual collection [6]. This cognitive-visual model is applicable to immersive (unframed, hence, expanded)

visual intelligence in that, as the artist Carolee Schneemann has written, "vision is not fact, but an aggregate of sensations" [7]. Victor Burgin supports Schneemann's claim when he writes that "seeing is not an activity divorced from the rest of consciousness; any account of visual art which is adequate to the facts of our actual experience must allow for the imbrication of the visual with other aspects of thought" [8].

According to Koestler's holon concept—established in Beyond Reductionism and in The Ghost in the Machine [9]-instead of cutting up immersive perceptual wholes into discrete focal parts, habitational ambient scopic vision should be understood as using synthetic sub-whole sets found within the atmospheric spectrum of immersive perception's entirety. It is the exposé of the synthetic atmospheric phenomenology of such holonogic sight (dependent on the linked and amassed sum-total of views) that will concern us here as we inspect the militarization of cultural spatial consciousness. For even though our scopic information is largely determined by the way our eyes work, horizontally implanted in the front of our face (cross-blending visual fields), our interpretations of that visual data are far from intractable. We are equipped with eyes with predominantly frontal focuses, which look straight on, of course, but in holonogic cognitive perception there are also aware, attendant fringes to sight that seep in peripherally.

The militarized new sense of threatening external space that I have just outlined perhaps is most strongly, and most fearsomely, exemplified by what has become known as C3I (pronounced see cubed eye): the electronic military-intelligence spatial fusion of control, command, communication and intelligence, developed as the electronic/digital system of strategic command over the United States military's nuclear arsenal. A fine overview of this trend toward militarizing and sighting outer (and hence, by inference, inner) space is provided by Herbert York in his essay "Nuclear Deterrence and the Military Uses of Space," in which he outlines the Strategic Defense Initiative (SDI) program of the 1980s and the ensuing militarization of outer space. Indeed York makes the point that "from the beginning" the use of the space program has been "primarily of a military, not civilian or scientific nature" [10]. As part of the SDI program U.S. President Ronald Reagan put forth in a 1983 speech his "vision" of what became pejoratively called "Star Wars"—perhaps the archetype of this oppressive spatial consciousness—now making a limited comeback under Clinton.

What I am proposing here, in agreement with Virilio, is that the holonogic sense of human, enfolded space was radically transformed in 1943, when the German rocket-launched bombs began to fall without warning, shattering the common sense of civilized, non-combatant, protected space, and that this remade human feelings toward external space thoroughly. As a consequence, I maintain, a consciousness of civilian aerial bombing, of atomic weapons, of military rocketry and of the eventual militarization of outer space has greatly engendered the abandonment of the horizontal line in art, which for thousands of years had been the basis of aesthetics and proportion. Of course accompanying this new sense of space was a general post-war urge to position one's artistic activities and ideas outside of previous contexts; in Western art and philosophy's case, outside of Surrealism and Existentialism.

Western consciousness just following World War II's brutal demonstration of nuclear destructive power on Japan began to be reflected forcefully in vanguard art of the post-war period (emblematic of this trend is the work of Yves Klein). Therefore, it is no coincidence that places of worship figured prominently among post-war modernist architecture. They became statements of yearning for a placid immersive cohesion with wholeness, as we see with Le Corbusier's Notre-Dame-du-Haut Chapel at Ronchamp and the Claude Parent and Paul Virilio project for the church of Sainte-Bernadette du Banlay in Nevers, France, designed in 1964 and built in 1966. This project was based on the architecture of confinement and territorial closure that the Nazis had built on the French Atlantic coast, as depicted and explained by Paul Virilio's classification of the bunkers in Bunker Archeology. These imposingly beautiful concrete monoliths seem almost as if they are floating autonomously on the silt and sand, and this sense of shifting edges was recreated in the church of Sainte-Bernadette du Banlay as the project took the form of a colossal bunker cracked in two halves. This design was intended as a critical statement of contemporary society's association with the military.

Moreover, in 1963, Parent and Virilio set up the group Architecture Principe

with the sculptor Morice Lipsi and the painter Michel Carrade so as to advance many Gesamtkunstwerk (total artwork) ideals into the 1960s. In this respect I should also mention here the Frenchbased international and multi-disciplinary Espace group, which was predicated on the idea of a Gesamtkunstwerk synthesis of the arts and on ideals of spatial unity and spatial continuity. Espace (which is French for space) was founded in 1935 by its chairman André Bloc (1896–1966), principally an engineer working in rubber and a painter and sculptor, whose interests lay in the expression of an underlying quest for a new relationship to space. As such he founded the journal L'Art d'aujourd'hui, the print organ for the Espace group. L'Architecture d'aujourd'hui in the 1930s was one of the first reviews concerned with modern architecture and was distributed widely. As such, it was the venue in which all the different schools of architecture exchanged theories, including those of the Dutch Neo-Plasticists Auguste Perret and Le Corbusier (born Charles Edouard Jeanneret-Gris). One of Espace's vice-chairmen was the artist Fernand Léger. The artist Sonia Delaunay, who took her version of the Gesamtkunstwerk synthesis of the arts into the creation of clothing and a matching automobile, was the general secretary.

Sadly Espace's holonogic ideals of spatial continuity died out after the war, as the hostilities had overturned the conception of concordant space (in fact André Bloc, who was Jewish, was forced to flee for his life). The group became more reactive toward the psychic effects of aerial bombings on civilian populations and the persistent nuclear threat thereafter. Influential with the group were the ideas, work and writings of Max Bill and Paul Virilio, who was one of the first to explore space's social and political ramifications. Following the end of the war, Bloc still conceived of the exploration of this topological space in terms of unity. But it is certain that the war brought about a more dour perception of spatial consciousness based on non-holistic notions of fragmentation and discontinuity, thus putting a temporary end to approaches based on the unity of total design. Indeed, with a heightened consciousness of war synthesis seems impossible.

Verily, this warring fragmentational consciousness is only now beginning to be reunited in a more natural (borderless) post–Cold War Euro environmental continuity (despite the crises in Yugoslavia) and by inevitable benevolent connectivist features of the Internet.

As an American artist living often in Europe, I notice this process of holonogic synthesis (re-conceived of in micro self-segmented ways within modest programs) unfold nearly every day with the unification of Europe, even given the retained suspicions towards idealist illusions that counterbalance this humanist desire for diverse but harmonious co-existence.

References and Notes

- 1. An earlier version of this essay was written during the bombing campaign conducted against the racial aggression in Yugoslavia in response to the online forum Cultural Practice and War, which was conducted by Blast under the project title "voti" (<http://www.blast.org/voti/indexX.html>).
- **2.** R. Ascott, ed., *Consciousness Reframed: Abstracts* (Newport, Wales: CAiiA, University of Wales College, 1997).
- 3. J. Nechvatal, "Immersive Ideals/Critical Distances: A Study of the Affinity between Artistic Ideologies Based in Virtual Reality and Previous Immersive Idioms" (Ph.D. diss., Newport, Wales: University of Wales College, 1999) (The introduction to the dissertation, entitled "Frame and Excess," can be read on-line at: http://www.dom.de/groebel/jnech/ideals.htm).
- 4. P. Virilio, Bunker Archeology (New York: Princeton Architectural Press, 1994).
- 5. P. Virilio, War and Cinema: The Logistics of Perception (London: Verso, 1989).
- ${\bf 6}.$ A. Koestler, ed., Beyond Reductionism (Boston, MA: Beacon, 1971) p. 48.
- 7. C. Schneemann, "Snows," *I-Kon* 1 No. 5, 12–14 (March 1968).
- 8. V. Burgin, *The End of Art Theory: Criticism and Postmodernity* (London: Macmillan Education, 1986) p. 53.
- 9. A. Koestler, *The Ghost in the Machine* (New York: Hutchinson, London and Macmillan, 1967) pp.
- **10.** H. York, "Nuclear Deterrence and the Military Uses of Space," *Daedalus: Weapons in Space Vol. I: Concepts and Technologies*, Issue 114, No. 2, 17–32 (Spring 1985).

Joseph Nechvatal has worked with ubiquitous electronic visual information and computer-robotics since 1986. His computer-robotic assisted paintings and computer animations are shown regularly in galleries and museums throughout the world. He serves as Parisian editor for Rhizome Internet http://www.rhizome.com and as a regular correspondent for Intelligent Agent http://www.intelligent-agent.com. Nechvatal presently teaches theories of virtual reality at the School of Visual Arts in New York City.

Manuscript received 1 July 1999.