Media and war... beyond propaganda

The media's potential to serve as weapons systems

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In tijden van oorlog – en ook daarbuiten – gebruiken overheden de media om de bevolking te informeren. Met meer of minder objectief nieuws of met propaganda. William Uricchio beschouwt in onderstaand artikel de mediatechnologie als een wapen in handen van de overheid. Hoe kunnen media bijna letterlijk fungeren als een wapensysteem?

In February and March of 1946, a delegation of visiting allied engineers and military interrogators gathered outside Berlin to watch a demonstration of the German *Tonne* guided missile.¹ The flying bomb was of particular interest thanks to its television-controlled guidance system. In a trenchant gesture, the German developers of the bomb targeted the guidance system at the photographic image of a young girl's face so that their interrogators could see, from the point of view of the device's television camera, how the projectile could be steered. This demonstration, flatly described in allied intelligence reports, manages to capture two very different senses of the media's role in warfare.² On one hand, it offers an early instance of television's deployment as part of a weapons system, an instrument in the targeting and delivery of a physically destructive force. On the other, the targeting of a girl's head with a 'television-weapon' offers a striking metaphor for the propagandistic use of media so evident in times of conflict.

This latter notion of media as part of a larger psychological offensive has quite rightly received a great deal of attention in the literature on media and war.³ Although in different wars and among different nations the goals have obviously varied, governments have used media systems to 'inform' or 'enlighten' their publics both with explicit propaganda and with selectively 'objective' news reports. As the Kosovo situation attests, the more extensive the media system, the more elaborated the various constructions of reality, resulting in very different truths for observers to select from. Viewed from hindsight, these representational strategies can in turn be considered as elements vital to the construction of an historical interpretation.⁴ Historians in particular have been left with the challenge

of sorting out how to read conflicting media messages. As evidence of a Rankean notion of what 'really' happened? As politically-inspired attempts to shape attitude and set agendas? As indications of what the public might have known or experienced? From this perspective, recorded media offer potential (if problematic) insights into an historical period, and particularly into the discursive elements that circulate within it, helping both to give form to period's own utterances and insights into how the media work to construct a possible past. But for historians, the central problematic remains: on what level can we best understand these texts?

This essay, however, will concern itself neither with issues of propaganda nor historical representation, thus side-stepping this vexed but well-developed problematic. Instead, it will take up several less-frequently explored aspects of the media's relation with war. The point of the essay is to draw attention to the rich array of mediations – both implicit and deployed – embraced by contemporary audio-visual communications systems and largely ignored by media researchers, and to call for more systematic consideration of the limits and meanings of media in the context of war. Having said this, however, further delimitation of media's interaction with war is necessary since the range of possible relations is far too extensive and varied to enumerate in the available space. Consider several non-representational manifestations of media and/in war which we will *not* pursue. 1) Cellulose nitrate, the highly flammable substance from which moving picture film was made at least through the third decade of the century, was chemically related to another application of nitrates – dynamite. The World War One-induced shortage of nitrates in Europe resulted in rationing of film stock in several nations, in turn, providing an effective element in America's 'media war' against the once powerful European film industry. 2) Shifting from physical to discursive realms, the post-war Hollywood domination of European screens provides another example of the media-war relationship. The newly developed Hollywood studios and the US Department of Commerce positioned the motion picture industry within a larger 'trade war' in which 'a foot of film equals a dollar in trade'. Film offered both direct export profits and promotion for US-goods. Moreover, such political-economic associations helped to enhance the legitimacy of the once disparaged entertainment film, if not as a cultural product at least as an economic enterprise of significant portions. 3) Another example of the war-media interface might be seen in war-induced transformations of media technology. From portable cameras and sound equipment, to new film stocks, to developments such as cinerama and virtual reality systems, military intervention has resulted in technologies very much taken for granted in the civilian media market and central to our changing notion of media hardware.

An American
airman sighting a
television-guided
projectile, ca.
1943.

These and many more examples suggest the range of rhetorical and developmental symbioses between the media and warfare. In the pages that follow, I will sketch a far less ambitious range of interconnections, focusing on media technology as a more traditionally conceived weapon. My goal is to discuss several interrelated areas – the media's potential to construct publics, to simulate experience and connect the viewing subject and the object viewed; to play a role in surveillance; and to serve literally as weapons systems. This terrain has been mapped by scholars such as Manuel De Landa, Paul Virilio, and Armand Mattelart, and my point is to amplify the challenges they have offered us.⁵

Media as a link. Construction, simulation, connection

Propaganda is about controlling what we see or are encouraged not to see. But media also function in terms of *how* we see, *how* media users relate to one another and to events in the world. Media can serve to construct publics and even nations; they can simulate time-space relations; and they can connect distant spaces – all attributes which have been deployed in warfare. Yet, despite the regular appearance of these functions on the eve-

ning news, in television documentaries, and on the contemporary battlefield, they tend frequently to be overlooked. Brief exemplification of these three different media applications may help to clarify the point.

German media developments between the late-1920s and the mid-1940s offer a set of insights into how media can be used to construct publics and events in a manner distinct from the usual focus on propaganda texts. During these years, broadcast authorities urged both the electronics industry and consumers to put 'a radio in every house' by co-ordinating the design and pricing of the 'people's receiver'. The campaign was a massive success with the public and it encouraged broadcasting journalists and engineers alike to theorise the potentials and implications of a public defined by a technology.⁶ Before 1933, writers such as Benjamin and Jeunger charted the utopian (and sometimes dystopian) possibilities of the new technology from divergent ideological perspectives; but after 1933, at least in Germany this changed to a more strictly defined sense of how radio would be used to forge the new spirit of the nation.

A revealing insight into this process, and how it would end the need for propaganda, appeared in secret plans for 'post-victory' Europe prepared late in 1943 by the German Post Ministry.⁷ According to the plan, the Ministry, responsible for *live* television broadcasting (in contrast to the Propaganda Ministry which was charged with control of filmed programming), would establish a live cable television news network across greater Germany and the occupied lands. Not far removed conceptually from CNN, this live connection between the leadership and its followers, the extension of nation through shared event, would constitute the neural network linking the new Germany. The need for propaganda, for persuasive programming, was done away with by the idea of linkage, of visual or acoustical connections binding a public or a nation to the events of the moment, thus exploiting a very different aspect of the media.⁸ This idea of media as a constructor of publics or nations, whether visual or not, returns in any number of instrumental ways which the military have been quick to deploy.

Beyond the just-described idea of media as constructor of publics, the issue of how media structure relations between the viewer and the world can be seen in the area of simulation. For example, contemporary tanks and fighter jets are generally outfitted with radar systems which display long-range external conditions to the gunner by means of a video display. The vast distances involved mean that physical sighting is often an impossibility, forcing pilots and gunners to rely instead on video representations combined with 'smart' projectiles for their deadly encounters. Targeting becomes a matter of the same eye-hand co-ordination skills commonly seen in video games, and indeed at least the American military services have claimed success in training their personnel with these games. Simu-

lation is also widely employed in pilot training, where again, computer-linked video display creates a 'realistic' environment where various scenarios can be played out in the safety of the simulator. Simulators of this sort combined with the just-mentioned targeting systems have, in turn, encouraged the development of ever more sophisticated media systems. Virtual reality and 3-dimensional media environments have been the most direct beneficiaries of this interest. Curiously, there seems to be some disagreement over the precise goal of the simulation involved in the target training exercises, with some analysts emphasising the development of better eye-hand co-ordination, and others (usually critics of video and computer games) alleging that they create a 'numbing effect' which helps to neutralise the moral impact of destroying human targets.

Beyond constructing publics and simulating reality, media can also literally connect disparate spaces. The incentive to develop facsimile machines (faxes) nearly one hundred years ago was linked to the military application of seeking to do *visually* what the telephone did *acoustically*. Telephonic reports of weather conditions or battle positions could more effectively be transmitted in graphic form, and military developers quickly seized upon fax technology, while pursuing the promise of early television for these same ends.⁹ Indeed, military strategists have long been interested in long-range visual contact. From the optical telegraphs of the eighteenth century to television to today's enhanced radar systems, media have been used to connect distant physical locations in real time. A central characteristic of these applications is that point-to-point communication is translated into displaced presence, linking the seeing subject and the object viewed through action. Obviously the previous example of simulation calls upon aspects of connectivity as well, but the implications of real-world intervention obviously render the concepts distinct. The larger point, however, regards media's ability to function in terms of how we see, how we relate to one another and to events in the world, constructing publics, simulating time-space relations, and connecting distant spaces.

Surveillance

Grumman Aviation's *Hawkeye* system, widely used in Israel's defence network, offers close-up aerial surveillance of hostile zones in the form of low-flying miniature airplane-mounted cameras. The panoptic logic charted in different ways by Jeremy Bentham and Michel Foucault finds a concrete manifestation in this flying-camera technology in which one is never sure if one has been observed until it is too late.¹⁰ Awareness of aerial surveillance, in turn, has on occasion provoked a form of theatricality

as counter-intelligence operatives did their best to mislead their airborne observers. Paul Virilio details British attempts to mislead German airborne intelligence about the location and timing of the D-Day invasion.¹¹ An elaborate set was constructed of barrack roofs, wooden tanks, canvas airplanes, and artificial ammunition stocks; sound effects took the form of radio theatre with channels filled with coded chatter about movements and logistics; and the set was brought to life by pensioners acting as soldiers, moving around for the benefit of the German cameras. The consequence, of course, was to render aerial spies into the cinematographers of a grand spectacle with (for the Germans) disastrous implications.

But perhaps the century's most ambitious surveillance system departed from the real world of aerial observation so cinematically manifest in the German case and so elegantly refined by Grumman Aviation, and reached into the world of science fiction for its reference. The US-Star Wars concept, by which the globe would be under constant surveillance by a network of satellites linked, in turn, to a destructive (or in Ronald Reagan's terms, protective) shield, linked the act of seeing to an almost reflexive military response. No longer would surveillance be mere information gathering, offering human agents decision-making options. Instead, it would be linked directly to response, existing as something like the doomsday machine described in *DR. STRANGELOVE*. But Reagan's Star Wars scenario went far beyond the Hollywood-like twist offered to the Germans by the British during the Second World War. In fact, it seems increasingly clear that the relationship of the observation process with the process observed was itself largely fantasy. The satellite surveillance portion of the plan worked, but the ambition of intercepting and destroying rockets moments after they are fired, despite the expenditure of many millions of dollars, remains simply technologically out of reach. The power of Star Wars was more the ambition of its vision than what it could actually deliver. The promise of surveillance linked to immediate action served, in this case, as an impossible spectacle, a spectacle which achieved its strategic ends by demonstrating its power as an observer. Star Wars provoked fear, and in the arms race where each side's defence industry was stimulated to outdo the other, Reagan escalated the terms to a point which none of the world's players could compete. Like a blockbuster Hollywood movie, lavish expenditure on special effects created a masterful illusion beyond the means of competitors' budgets. In this case, the illusion of total surveillance backed by immediate action was sufficient, for a short time anyway, to capture the imagination of the global audience. Something like the British staging of movie for German aerial cameramen and generals back home occurred, with Hollywood inspiring the US defence industry to create a masterful illusion for the 'evil empire's' military strategists.

Weapons

A set of 4 16-mm film images of a test of a German television-based missile guidance system, ca. 1943.

Bron: DDR Post Ministry Archive

This essay opened with a reference to the German television-guided *Tonne* system. The *Tonne* was one of several different product lines which included television-guided bombs and torpedoes and heat-seeking missiles. Produced in quiet co-operation with several American-based multinational electronic firms (an underappreciated aspect of ww2 technology development and transfer), the guidance systems permitted a pilot to 'see' his target from the perspective of the missile, guiding it to successful contact.¹² By the war's end, Allied intelligence found one factory that was pro-

ducing 300 miniature cameras per month with semi-skilled slave labour for the still-experimental television missile guidance program. Surviving test material indicates that the images taken from the projectiles looked very much like some of those shown during the Gulf War, where the viewer had a missile's-eye view of the ever-closer target. Violence and the video screen are neither new nor most effectively considered through issues of textuality, as these deployments suggest.

The United States Air Force and Navy have developed new technologies which extend the logic of these systems to an extreme. The idea of visual assault is literally present in the AFT-I system with which some F-16s are outfitted. This system enables the pilot to target his enemy visually, that is, through human eye contact, and to fire on voice command. As in the Star War scenario, the process of seeing is no longer innocent – a point central to Virilio's *War and Cinema*. It entails a potential act of destruction, although for the moment we can still take solace in the fact that the AFT-I system still requires the conscious intervention of the pilot who must make a decision and utter the word 'fire'.

Virilio's argument regarding vision's loss of innocence finds a disturbing expression with the detonation of the atomic bomb in Hiroshima. He argues that the exploding bomb functioned as a kind of camera – its flash burning the shadows of objects into brick and cement, or burning the patterns on clothing onto the skins of its victims. In this sense, one might argue that the bomb, too, served as a kind of medium – a photographic medium in the sense of engraving with light invoked by one of the medium's inventors, Nicephore Niepce.¹⁹ The point has not been lost on weapons designers, some of whom have developed so-called 'flash-bombs' – extreme versions of the familiar flash of light which accompanies cameras used in low-light situations. The difference is that instead of using the flash for purposes of illumination, it is designed to blind its victims. From vision as a means of destruction to the destruction of vision, the components of the media both directly and metaphorically have served Mars' purpose in ways far more direct than the persuasion associated with propaganda.

Conclusion

Media entail representation. Generally, we take that to mean that the various media, each in their own way, stand between us and the world, constructing and offering selected access to the sounds, images and events 'out there'. We are aware that the images are selected, that they are only pieces of time and space, that they lack solidity or sometimes colour. But they offer us views of things we otherwise wouldn't see, or new ways of

seeing the things we see so often that we take them for granted. The issue of propaganda largely operates on this level – it is mediation with a specific agenda, it is representation with a pointed purpose. But as this essay has called upon the work of writers such as Virilio and De Landa who have developed a very different vision, one more concerned with the media's potential to offer specific and powerful military interventions than with the sorts of textual operations which have dominated discussion within mainstream scholarly circles. Their work maps a conception that complements the art historical and literary visions of the media with which we are familiar, a conception necessary if we are to comprehend the fullness of the media's historical and presentist operations.

One way to express this is by considering other meanings of 'representation' – literally, to re-present, to make present elsewhere. The topics which this essay has covered – media as simulation, as connection, as surveillance, as a weapon – all point to the use of media as a way to reposition object-subject relations. From the hindsight of history, this notion of representation seems to have moved towards extending the senses (especially vision), virtually extending presence, and with it, the viewing subject's control of the world seen. One can see evidence of this in nightly news images of Nato missile guidance systems, images that, like Germany's 'Tonne' targeting system, attest both to the propaganda value of representation as well as to the new subject-object relations entailed in it. This latter tendency has moved towards its logical culmination with systems such as the AFT-I and Star Wars which link perception with action. Curiously, indeed almost perversely, the closer we come to the merger of perception and action, the more the systems and discourses that we employ look like the games we play. But in an era where Hollywood films inspire the largest defence expenditures to date, and where videogames anticipate our most sophisticated weapons systems, perhaps this should come as no great surprise.

Noten

- 1 This article is based on a lecture, delivered by the author on March 16 1998, as a part of a cycle entitled 'Media and the war', organised by Studium Generale Utrecht.
- 2 The interrogations appear in the British Intelligence Objectives Sub-Committee Final Report No. 867, 'Television development and application in Germany'. For fuller details of this incident, see: W. Uricchio 'High-definition television, big screen television and television-guided missiles. British Intelligence Objectives Sub-Committee Report # 867,' in: *Historical Journal of Film, Radio and Television*, 10, 3, 1990, p. 339-343.

- 3 The literature here is vast, including readings of texts and institutions as in R.E. Herzstein, *The war that Hitler won. Goebbels and the Nazi media campaign*, New York 1987; and in E. Herman and N. Chomsky's study of the politics of influence in Vietnam, *Manufacturing consent. The political economy of the mass media*, New York 1988; as well as including readings of contexts and intertexts as evidenced in K. Dibbets and B. Hogenkamp (eds.) *Film and the First World War*, Amsterdam 1995.
- 4 Most recently, for example, B. Kester, *Filmfront Weimar. Representaties van de Eerste Wereldoorlog in Duitse films uit de Weimarperiode*, Hilversum 1998.
- 5 P. Virilio, *War and cinema. The logistics of perception*, London 1989; M. de Landa, *War in the age of intelligent machines*, New York 1991; and elements in: A. Mattelart, *The invention of communication*, Minneapolis 1996.
- 6 See among others: A. Diller, *Rundfunkpolitik im Dritten Reich*, München 1980; H. Riedel, *60 Jahre Radio. Von der Rarität zum Massenmedium*, Berlin 1983.
- 7 For more details, see: W. Uricchio, 'Early German television and the New Europe. The case of Fernsehsender Paris', in: *MIT working papers in Cultural Studies* 26, Cambridge MA 1991.
- 8 For a fuller explication of connectivity and its implications, see: W. Uricchio, *Media, simultaneity, convergence. Culture and technology in an age of intermediality*, Utrecht 1997; Patrice Flichy offers a related argument regarding connectivity through telegraphy and the idea of the French nation in: *Une histoire de la communication moderne*, Paris 1991.
- 9 Although a 'device for the transmission of written materials and line drawings' had been designed and built as early as 1881 by Bidwell, Max Dieckmann's 1906 device – which displayed transmissions on a cathode ray tube – found a more prominent place in history. Dieckmann supported the development of his device by appealing to German military authorities for help.
- 10 Inspired in part by eighteenth century panoramas, Jeremy Bentham designed the panopticon as a prison in which large numbers of inmates, positioned against the outer walls of the cylindrical building, could be observed by relatively few guards located in the central core. But beyond staffing efficiency, the real power of the panopticon resided in the fact that prisoners had no way of telling when they were being observed. Michel Foucault seized upon this notion to discuss the microtechnologies of power in contemporary culture. See: M. Foucault, *Surveiller et punir. Naissance de la prison*, Paris 1975, especially chapter 3.
- 11 Virilio, *War and cinema*, p. 63-64.
- 12 The recent expiration of restrictions on certain 'sensitive' ww2 archival materials in Britain and the US has stimulated a new round of research into these developments. Publications are currently in preparation by researchers such as Joseph Hoppe in Berlin, Albert Abramson in Las Vegas, and by myself. Up to this point, close similarities in design and in patent dates of certain US and German television-based weapons, combined with cross-licensing agreements between firms such as RCA and IT&T and German counterparts, suggest a pattern of close collaboration that lasted throughout the war.
- 13 Virilio, *War and cinema*, p. 81.